A DETAILED APPROACH TO LOW-GRADE GEOTHERMAL RESOURCES IN THE APPALACHIAN BASIN OF NEW YORK AND PENNSYLVANIA: HETEROGENEITIES WITHIN THE GEOLOGIC MODEL AND THEIR EFFECT ON GEOTHERMAL RESOURCE ASSESSMENT

A Thesis

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by

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ABSTRACT

The potential to utilize widespread low-grade geothermal resources of the Northeastern U.S. for thermal direct use and combined heat and power applications can be realized using technologies embodied in Enhanced Geothermal Systems (EGS). In lower grade regions, accurate knowledge of small variations in temperature gradient will be crucial to the economic viability of EGS development. In order to facilitate EGS project placement and design, this study draws a more complete picture of geothermal resources in the Northeastern United States—with a particular focus on New York and Pennsylvania—by incorporating thousands of new temperature-depth data collected as a result of continuing drilling for petroleum and natural gas in the region. Using these new data, a series of maps covering the Appalachian Basin of New York and Pennsylvania were produced that show variations in subsurface thermal gradient, surface heat flow, and projected temperature at depth. The increased spatial accuracy and resolution compared to earlier geothermal maps of the Northeast U.S. illuminate better spatial variations in the resource quality, and have a much smaller degree of uncertainty in both extent and magnitude. The maps indicate that the temperatures required for direct-use applications are available at economically viable drilling depths (shallower than 6 km) over a majority of the region.

Although much was learned by using a simplified geological model of the Appalachian Basin of Pennsylvania and New York that enabled the rapid incorporation of temperature-depth data, geologic heterogeneities must be incorporated into the sedimentary model with corresponding heat flow and temperature at depth calculations in order to better represent the availability of low-grade geothermal resources. An improved sedimentary model accounts for Precambrian faults and variations in overall sediment thickness that result from those faults in the state of Pennsylvania. Visual comparison of the maps produced using the initial, simple model shows that the location of the Rome Trough half-graben in the southwestern and central parts of Pennsylvania aligns with a trend of above-average geothermal gradient (30°C/km) and

heat flow (70 mW/m^2) in an area of high data density. Thus the geologic model was refined to include the strata filling the Rome Trough, with a concomitant adjustment in the equation for the projected temperature at depth. It is possible that the Rome Trough basement faults are related to the locations of basement intrusions and enhanced deep basin fluid flow, which could result in increased radiogenic heat generation and convective heat transport, respectively. Evaluation of these variables across the study area would increase certainty regarding the location of temperature anomalies and help to better identify areas with ideal characteristics for EGS development.

BIOGRAPHICAL SKETCH

Elaina N. Shope graduated with honors from the University of Michigan in 2010 with a Bachelor of Science degree in Environmental Geosciences. Her undergraduate field coursework in renewable and fossil fuel energy resources led to the pursuit of a graduate degree that would combine both geology and sustainable energy analysis. During her two years at the Cornell Energy Institute, she has had the opportunity to take both interdisciplinary and advanced geology courses, travel abroad, and befriend a variety of people within the geothermal community. She plans to enter the geothermal industry post-graduation and hopes to witness the successful widespread utilization of low-grade geothermal resources in NY and PA during her lifetime.

To Andrea, Tim, and George, who have been great friends and superb members of the Geothermal Resource Assessment team.

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LIST OF ABBREVIATIONS

AAPG	American Association of Petroleum Geologists
BHT	Bottom hole temperature
COSUNA	Correlation of Stratigraphic Units of North America
EGS	Enhanced Geothermal Systems
NY	New York
PA	Pennsylvania
SMU	Southern Methodist University

CHAPTER 1

MOTIVATION AND APPROACH

Public and scientific perceptions of geothermal energy as a viable and necessary component of our energy future continue to be constrained by a widespread focus on electricity generation. For example, the current inability of relatively low-grade geothermal resources in the Northeastern United States to efficiently generate electricity severely limits their economic viability if thermal direct use and combined heat and power applications are not also considered. With direct use and co-generation applications, development of Enhanced Geothermal Systems (EGS) technology provides a feasible path for these lower grade resources to be economically competitive in today's energy markets.

Unlike traditional hydrothermal resource projects, EGS can be deployed in areas with high subsurface temperatures that lack a flow of natural water. Unfortunately, the drilling depths and uncertainties associated with accessing these systems results in both increased risk and increased cost for potential developers. While electricity generation typically requires well-head temperatures in excess of 150°C, direct-use of geothermal heat for space heating, water heating, and industrial and agricultural processes can be achieved with well-head temperatures as low as 80°C - reducing required drill depths and, subsequently, risk and cost. The lower temperatures also effectively expand the potential resource-base and make EGS much more viable in areas with generally lower subsurface temperatures such as the northeastern and mid-Atlantic U.S. The proceeding work has been completed with EGS direct-use in mind.

This project is part of a joint effort with Southern Methodist University (SMU) to create an updated heat flow map of the United States. SMU's 2004 geothermal map of North America was based on very limited data in the northeastern and mid-Atlantic regions of the country. Consequently, the 2004 treatment was unable to characterize potential geothermal resources in these regions with the same accuracy or fidelity as was possible in the midwesten and western regions of the U.S. (Blackwell and Richards, 2004). With the use of recently acquired oil and

gas well-log data from many eastern states, it is now possible to develop a refined map of heat flow that can be used to identify areas with the potential for development of EGS.

The resulting heat flow map, as part of the larger Geothermal Data Aggregation Project funded by the Department of Energy, is intended to support the development of geothermal power plants by reducing the cost and risk associated with resource identification and exploration. The collection of temperature-depth data will be provided to the National Geothermal Database System, led by David Blackwell (SMU) and Fabian Moerchen (Siemens Corporate Research), to enable public access and sharing of geothermal information. Funding for this project was provided by the Department of Energy's Geothermal Data Aggregation Project (DOE grant DE-EE0002852), the Integrative Graduate Education and Research Traineeship, the National Science Foundation, and the Cornell Atkinson's Center for a Sustainable Future.

CHAPTER 2

GEOTHERMAL RESOURCE ASSESSMENT: A DETAILED APPROACH TO LOW-GRADE RESOURCES IN THE STATES OF NEW YORK AND PENNSYLVANIA[1]

2.1 Introduction

The initial geothermal assessment presented here examines the states of New York and Pennsylvania with the intent of future expansion into the New England region. Well-log data consisting of bottom hole temperatures (BHTs) and vertical depth measurements from the two states were assembled and then corrected to account for drilling-induced errors in the temperature measurements (discussed in further detail below). A spatially variable (in both depth and surface extent) model of subsurface thermal conductivity was constructed based on the AAPG COSUNA (Correlation of Stratigraphic Units of North America) publication for the Northern Appalachian Basin (Orlo, 1985). The modeled thermal conductivity and corrected thermal gradients were then used to produce comprehensive maps of heat flow at the surface and temperature at depth, using the methods described by Stutz et al. (2012).

2.2 Methods

2.2.1 Data Collection

Well data in the form of archived oil and gas well logs were collected from SMU, the Pennsylvania Geological Survey, the New York State Museum, and the New York State Department of Environmental Conservation (NYSDEC, 2011). The total collection was reduced to include only wells with BHT measurements taken at depths greater than 600 meters, thereby minimizing the effects of groundwater movement and near-surface temperature variations on thermal gradient calculations. This depth cutoff was applied by Frone and Blackwell (2010) and

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has been used to maintain consistency across datasets for the compilation of a final heat flow map by SMU and Cornell. The resulting dataset contained 814 data points in New York and 3,771 data points in Pennsylvania. Due to the spatially-variable nature of oil and gas deposits (and thus oil and gas drilling), the BHT data points in this dataset are not spatially homogeneous. Rather, they are often clustered together in certain areas where oil and gas drilling are more prevalent, such as west-central Pennsylvania in the deepest parts of the Appalachian Basin. No new data points have been identified in northeastern New York and southeastern Pennsylvania.

2.2.2 BHT Corrections

BHT data is commonly of poor quality and often the exact conditions leading up to and at the time of measurement are not well documented. Additionally, BHT points are taken from open hole well logs where near field temperatures will have been significantly disturbed due to the circulation of large quantities of drilling mud utilized in the drilling process. As such, the true "equilibrated" BHT measurements are not obtained. This inherent error must be removed by calibration with oil and gas wells of similar depth that are at thermal equilibrium in order to calculate representative geothermal gradients and surface heat flow. The most mathematically robust, and therefore commonly regarded as most accurate, correction utilizes a Horner plot as originally proposed by Bullard (1947). However, this correction method requires multiple temperature readings through time following cessation of well drilling—a practice that is seldom applied in the oil and gas industry—and thus cannot be applied to wells with a single BHT measurement (Demming, 1989).

As a practical alternative to Horner plots, purely empirical BHT corrections are often developed and applied within a field or geological basin. Within a single field or basin, most wells will be drilled in a very similar fashion, through similar geological units, and to similar depths. As a result, they will have experienced comparable magnitudes of deviation from thermal equilibrium. The majority of empirical corrections attempt to estimate this deviation as a function of depth. For example, in the AAPG Geothermal Survey of North America, Kehle

(1972) proposed that a 3rd order polynomial could be fit to the difference between measured BHT temperature and equilibrium temperature. This resulted in an equation similar to Equation 2.1, where ΔT is the difference between equilibrium temperature and the observed temperature on a geophysical log at depth z.

$$\Delta T = a + bz + cz^2 + dz^3 \tag{2.1}$$

The correction coefficients a, b, c, and d could be estimated empirically by least squares regression given data within any specific region.

Similarly, Harrison et al. proposed a second order polynomial, based on data from the state of Oklahoma (1983). The simplified form of this correction can be seen in Equation 2.2, where ΔT is in °C and depth (z) is in meters.

$$\Delta T = -16.51 + 0.018z - 2.34E10^{-6} z^2 \tag{2.2}$$

The number of significant figures in Equation 2.2 is consistent with the accuracy of temperature-depth measurements and still retains the precision of the quadratic correlation. The resultant ΔT value is a correction factor that can be added to the BHT from a geophysical log header to yield a corrected equilibrium temperature.

The Harrison correction was successfully applied in basin analysis studies of the Anadarko Basin in Oklahoma (Gallardo and Blackwell, 1999). Additionally, by incorporating the work of H. C. Spicer (1964), which provided a set of equilibrium data wells in multiple states, the Harrison equation (1983) has been shown to provide a suitable correction in many other areas, including the Northeastern U.S. Frone et al. (2011), for example, applied this correction to New York, Pennsylvania, and West Virginia with reasonably accurate results. Thus,

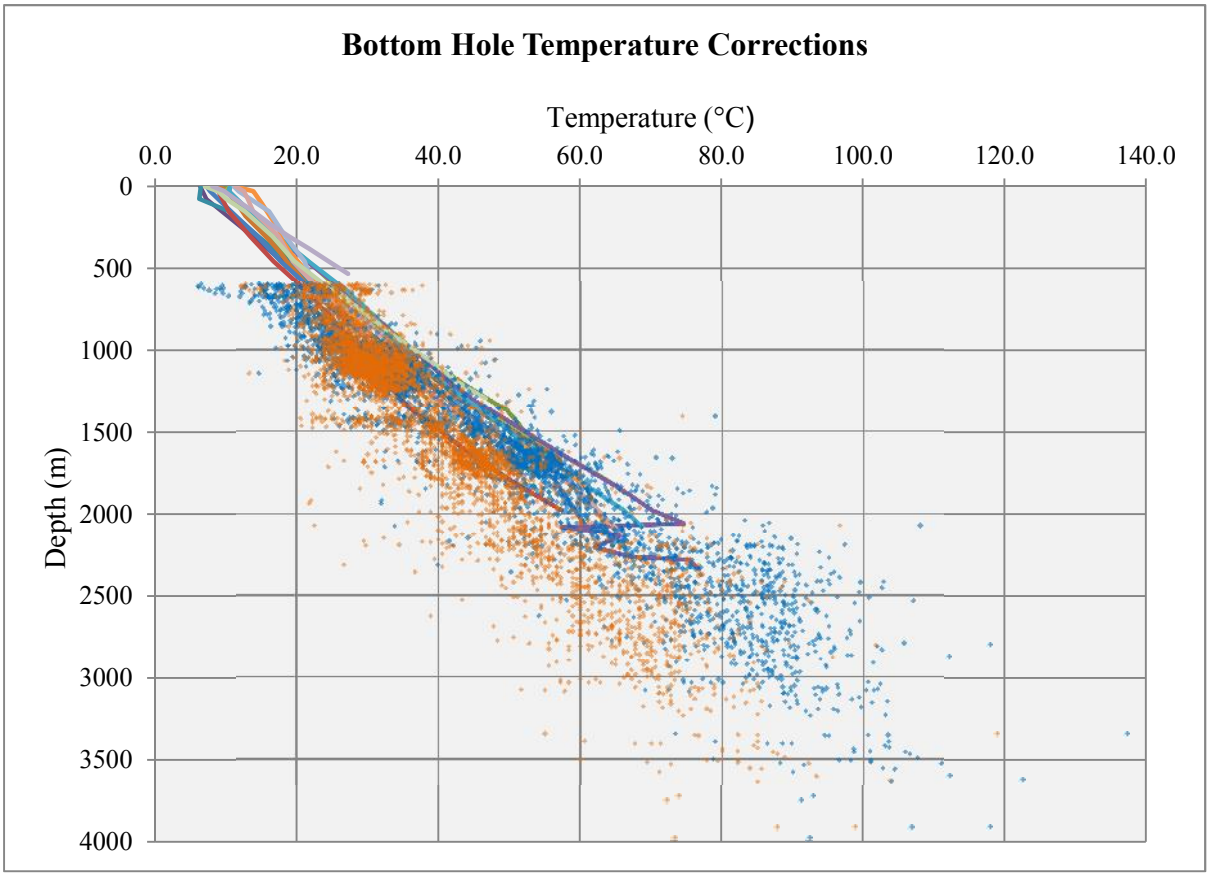

Figure 2.1: Temperature measurements from 14 equilibrated wells are compared to Harrison-corrected (blue) and uncorrected (orange) bottom hole temperatures (data sources: SMU; PA Geological Survey; NYS Museum; NYSDEC, 2011). The applied Harrison correction is viable for depths greater than 1000 m. Data points shallower than 600 m and deeper than 4000 m were not included in the figure due to near-surface temperature variations and sizing of the chart, respectively.

based on the nature of this dataset and other factors, the Harrison correction was selected as the most practical and feasible correction for the analysis presented here.

The resulting BHTs were plotted against fourteen thermally equilibrated Spicer wells in New York and Pennsylvania, the majority of which extended to depths of 1500 to 2000 meters. As shown in Figure 2.1, it was found that the Harrison correction adequately adjusted BHTs for wells in excess of 1000 meters. However, for wells shallower than 1000 meters, uncorrected values were more likely to be representative of thermal equilibrium. Given that the Harrison correction is an empirical correlation based in Oklahoma, it accounts for warm mud that has been

stored at surface temperatures before being circulated downhole. Average drilling mud temperatures in NY and PA will be approximately 6°C lower than those in Oklahoma (Gass, 1982) while being stored at surface prior to, and during, initial down-hole circulation, thus diminishing the need for correction at shallow depths.

2.2.3 Thermal Gradient Calculations

The Harrison-corrected BHT values, measurement depth, and average annual surface temperature of the region were used to calculate an average thermal gradient (*dT/dz*) at the location of each data point. Equation 2.3 defines T_{BHT} as the corrected bottom hole temperature in °C, T_S as the average annual surface temperature in °C, and z as the vertical depth in kilometers.

$$\left(\frac{dT}{dz}\right) = \frac{T_{BHT} - T_S}{z} \tag{2.3}$$

The vertical depth was assumed to be the lesser of either the logging depth, as measured by the well-logger, or the true vertical depth (TVD), as reported by the driller. The value of T_S was estimated to be 9°C based on Gass' (1982) map of U.S. surface temperatures. In the case of duplicate well entries (due to logging of the same well at different depths), the gradients were averaged based on the simplification that, below the domain of fresh water aquifers, the temperature gradient is constant with depth for a given location.

2.2.4 Heat Flow Calculations

Surface heat flow at a given location was calculated as the product of the thermal gradient and an average thermal conductivity value (k), as shown by Equation 2.4.

$$Q_s = k\left(\frac{dT}{dz}\right) \tag{2.4}$$

At each individual well location, the thermal conductivity values of the underlying geologic formations were calculated as a weighted average based on their thicknesses. The formation lithologies and thicknesses were derived from the AAPG Northern Appalachian COSUNA (Correlation of Stratigraphic Units of North America) cross section (Orlo, 1985). COSUNA defines a generalized stratigraphic column containing the formation names, range of unit thicknesses, and primary lithology for a set of regions, with the regions consisting of multiple counties. This information was digitized and supplemented with additional descriptions from the USGS. Using a previous compilation of lithology-specific thermal conductivities by Beardsmore and Cull (2001), which included the mean values from eleven different studies, the thermal conductivities of each rock type were averaged and assigned to individual formations within the COSUNA sections.

In order to better represent the conductivity at a specific location, it was necessary to refine the total sedimentary thicknesses shown on the large-scale COSUNA sections. The area of study is located in the northern Appalachian Basin with sedimentary thicknesses ranging from 0 to 10 km, increasing steadily to the southeast and reaching maximum thicknesses along the western edge of the Appalachian Mountain range. A map of the sedimentary thickness from the AAPG Basement of North America (1967) was used to generate a 3D surface representing depth to basement rock over the aerial extent of the wells (Figure 2.2). Given the location of an individual well, the 3D surface interpolated the depth to the basement; the resulting value was applied as a scaling factor to the overall thickness of the COSUNA cross-section. The average thermal conductivity to a given well depth was then calculated using the procedure described by Stutz et al. (2012).

2.2.5 Temperature at Depth Calculations

The thermal model developed by Stutz et al. (2012) was used to calculate the anticipated temperature as a function of depth. Several assumptions were used in the model as deemed appropriate for the Appalachian basin of NY and PA. Based on the work of Blackwell, Negraru,

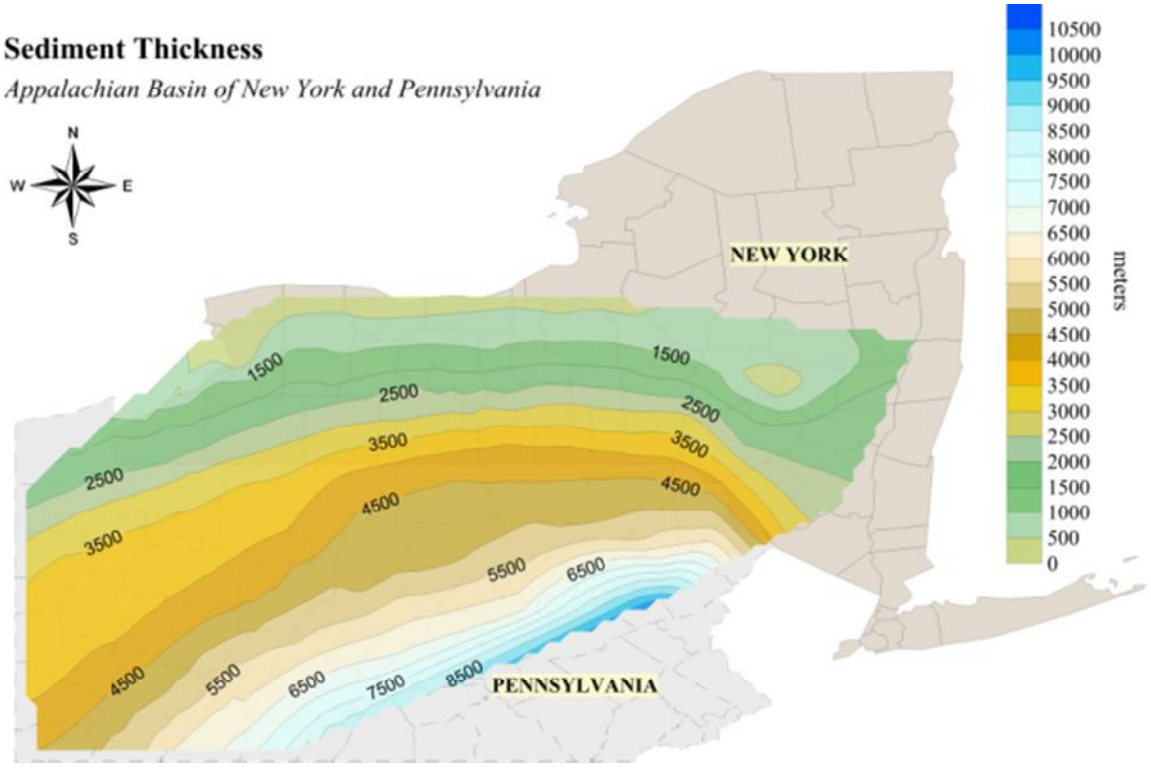

Figure 2.2: The thickness of the sedimentary units within the Appalachian Basin of New York and Pennsylvania, representing the depth from the surface to the underlying basement rock based on a revised version of the AAPG map (1967). From this map, the sedimentary thickness at a given well location was predicted.

and Richards (2007), the thermal conductivity of rocks will approach a constant value at depth as a function of increasing temperature and pressure. Therefore below a depth of 4 km, a value of 2.7 W/m·K was used regardless of lithology (Birch and Clark, 1940; Sibbit, Dodson, and Tester, 1979; Clauser and Huenges, 1995). It was also assumed that mantle heat flow was constant at 30 mW/m^2 over the entire area and that the sedimentary strata could be modeled as a uniform radiogenic layer producing 1.0 $\mu W/m^3$ (Birch, Roy and Decker, 1968; Allen and Allen, 2005; Blackwell, Negraru, and Richards, 2007). The radiogenic contribution of the basement (A_b) was then calculated using these assumptions and Equation 2.5.

$$A_b = \frac{Q_s - Q_m - A_s z_s}{b} \tag{2.5}$$

Q_s and Q_m are sedimentary and mantle heat flow (respectively), A_s is the radiogenic contribution of the sediments, z_s is the thickness of the sediments, and b is the characteristic thickness of the basement (that which produces a meaningful level of radiogenic heat).

Any well temperature that resulted in a lower heat flow than what would be expected from the mantle heat flow and the sediment radiogenic contribution was neglected. Based on the assumptions described, it would be possible to have a negative A_b value returned. It was assumed that convective flow or some other force was removing heat from this location, or that the assumption of 1.0 $\mu W/m^3$ radiogenic contribution from the sediments was too high. However, without more detailed information it was not possible to determine the exact nature of the error. As this situation affected a very small proportion of wells (approximately 2.5%), data from those wells were disregarded. We intend to evaluate wells in this category in greater detail in future research in an effort to glean more information regarding basin-wide, as well as more localized, processes. The remaining wells used in this analysis were then thermally modeled to estimate temperature at depth.

2.2.6 Mapping Techniques

Contour maps of the calculated geothermal gradients and heat flow were produced through the Surfer Mapping System from Golden Software, Inc. The Natural Neighbor gridding method, ideal for varying data densities, accounted for the spatial irregularity of the data points throughout New York and Pennsylvania. It also gave weight to values with proximity to each grid node. Grid values were not extrapolated beyond the spatial extent of the data; areas lacking data points were left blank to avoid misrepresentation, as seen in the eastern regions of the states.

2.3 Discussion

The thermal gradient and heat flow maps produced for this study (Figure 2.3 and Figure 2.4) provide a detailed visual representation of the potential geothermal resources in western New York and Pennsylvania. The average thermal gradient of the dataset (using Harrison-

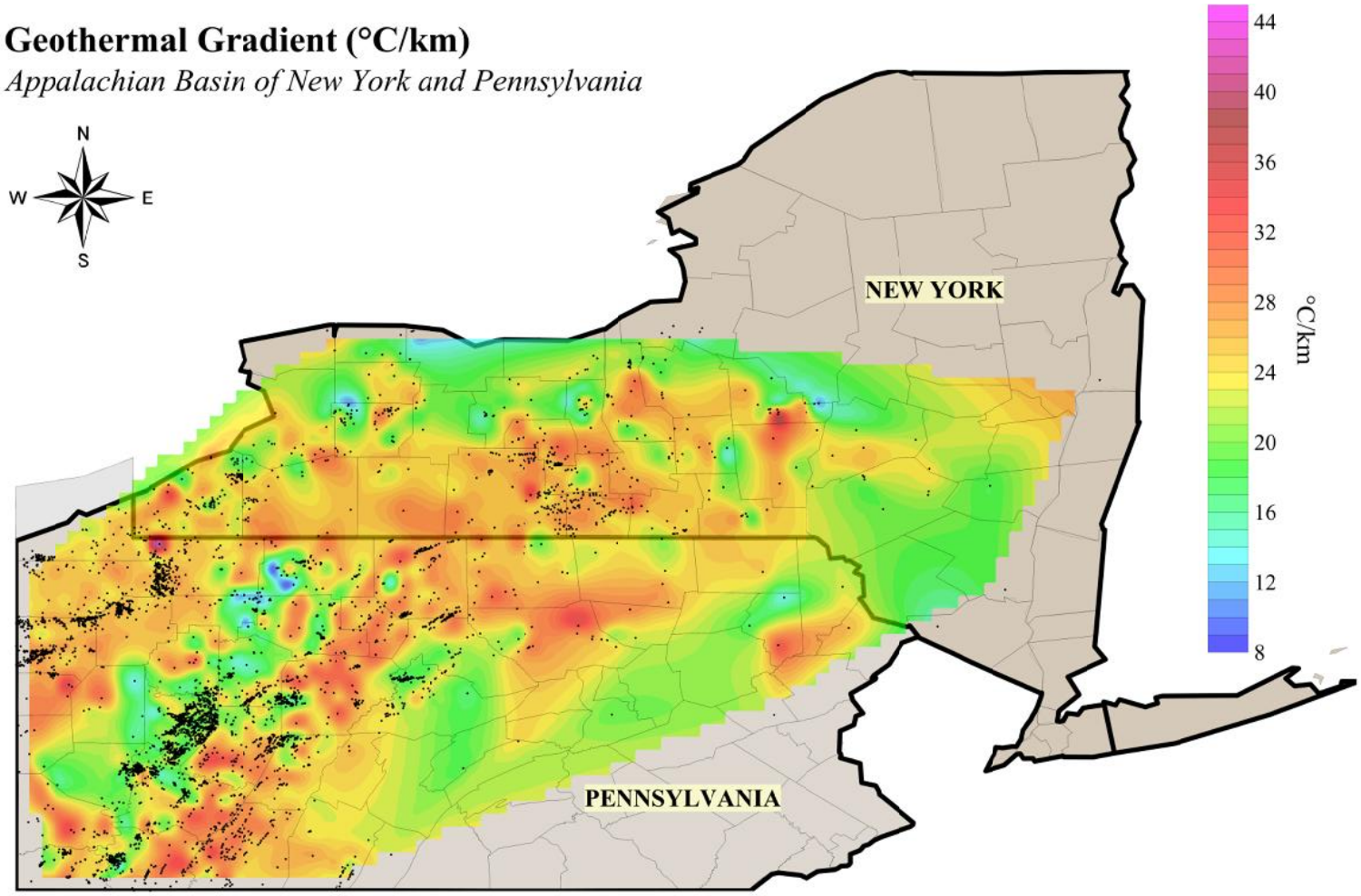

Figure 2.3: The thermal gradient of geothermal resources within the Appalachian Basin of New York and Pennsylvania. The black points are locations of the individual well whose bottom hole temperature and depth measurements are included (data sources: SMU; PA Geological Survey; NYS Museum; NYSDEC, 2011).

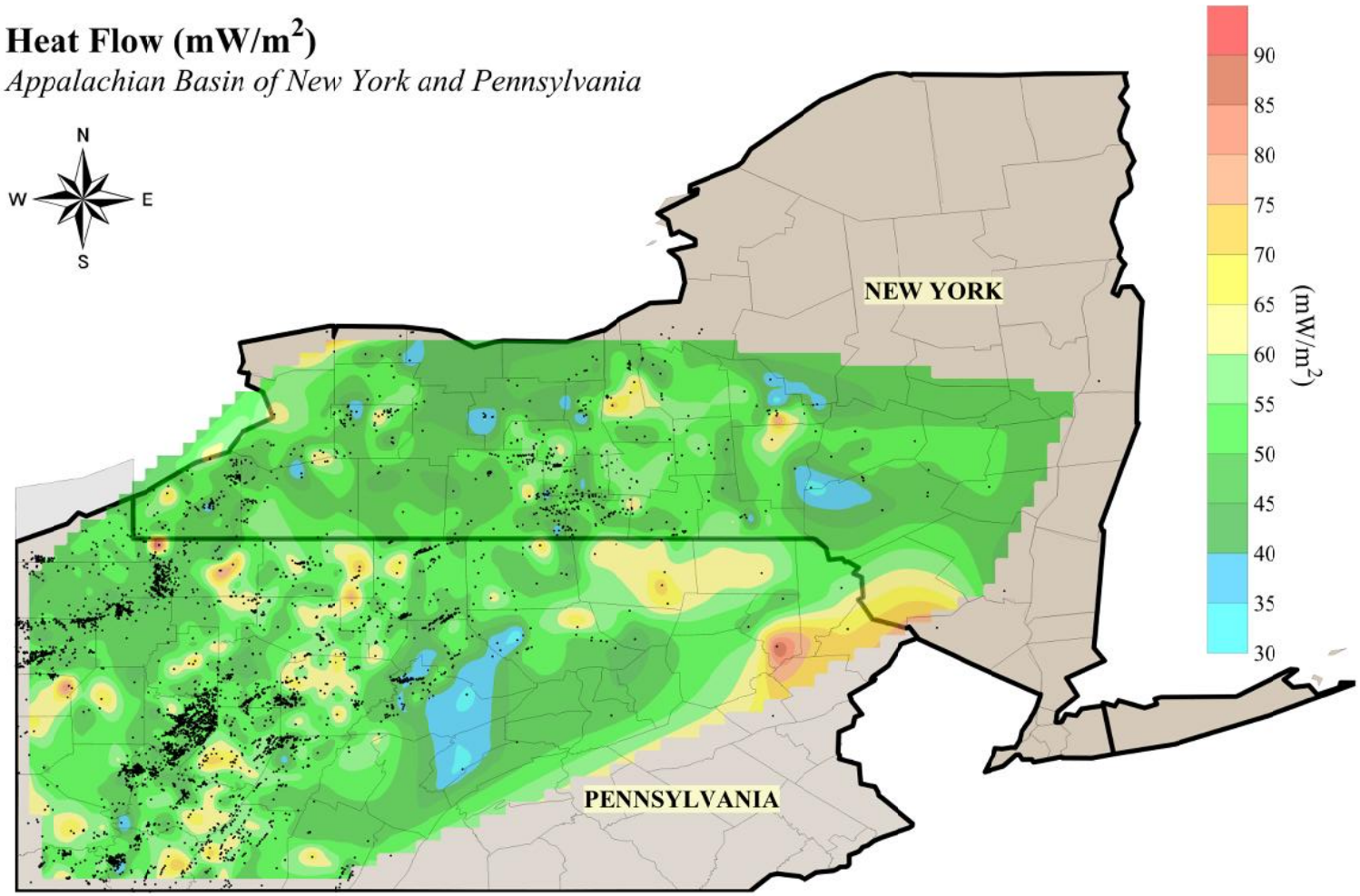

Figure 2.4: Surface heat flow in the Appalachian Basin of New York and Pennsylvania, calculated as the product of thermal gradient and average thermal conductivity for a specified location. The black points are locations of the individual well whose thermal gradients were derived (data sources: SMU; PA Geological Survey; NYS Museum; NYSDEC, 2011)

corrected BHTs) is 23 °C/km with an average surface heat flow of 50 mW/m^2, coinciding with conventionally-accepted average continental values of 25°C/km and 50 mW/m^2. Comparison with the 2004 heat flow map produced by Blackwell et al. (Figure 2.5) illustrates the degree to which spatial resolution of the geothermal resources has been increased.

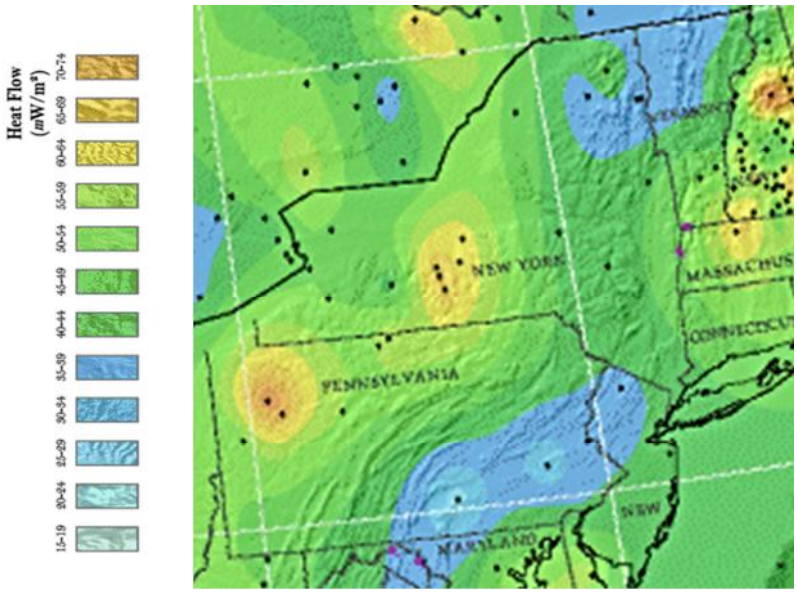

Figure 2.5: Limited data in the Appalachian Basin of New York and Pennsylvania as shown by the earlier SMU map (Blackwell, 2004). An increased number of data points have increased the understanding of heat flow distribution in the region.

Isothermal contour maps resulting from the methodology described in Stutz et al. (2012) show the projected depths at which temperatures of 80°C (Figure 2.6) and 150°C (Figure 2.7) can be reached. 80°C, the target temperature for a direct-use district heating system, is accessible over a large area of Figure 2.6 at depths shallower than 6 km (often considered the economically viable drilling depth) (Fox et al., 2011). It is therefore within reason to state that the assessed area shows great potential for deployment of geothermal district heating. Throughout a majority of the mapped area in Figure 2.7, the temperatures required for electric power generation (>150°C) are found at depths of 6 to 10 km; although these depths are accessible with current technology they will be very challenging to produce and develop

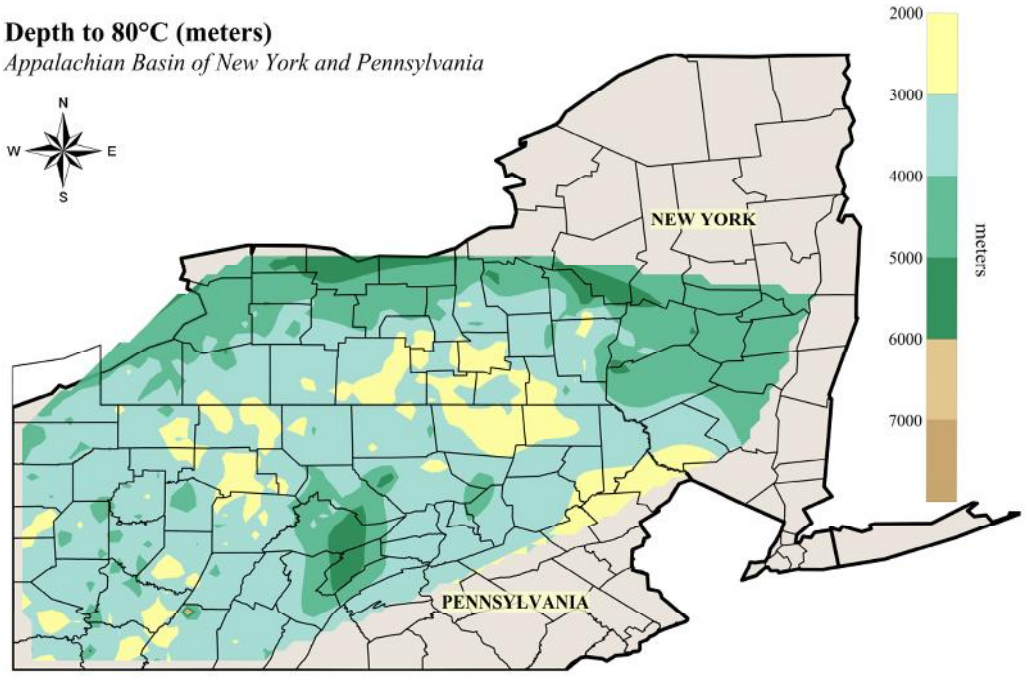

Figure 2.6: Isothermal map of depths at which 80°C temperatures are predicted to exist. This temperature is ideal for direct-use district heating systems.

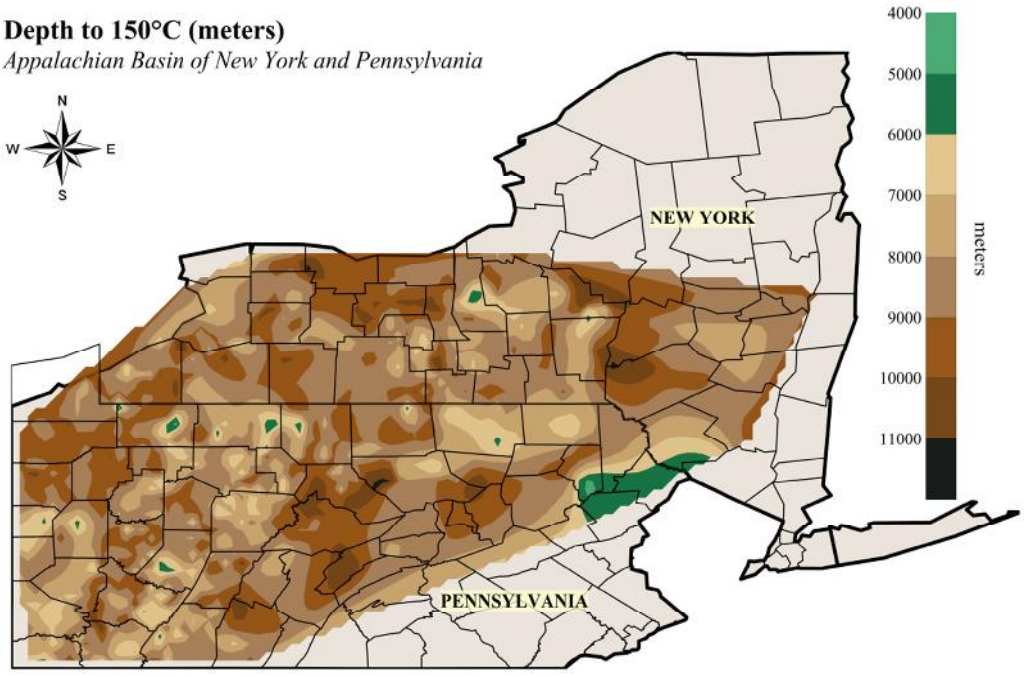

Figure 2.7: Isothermal map of depths at which 150°C temperatures are predicted to exist. This temperature is applicable for electricity generation.

economically at today's electricity prices. Co-generation of electricity and heat would be much more attractive for these resources (Tester et al., 2010).

By increasing spatial resolution over previous geothermal resource maps of the Appalachian Basin, several localized "hot spots" can now be identified. In some cases, temperatures capable of producing electric power are projected at depths as shallow as 5 km (Figure 2.7). The Pennsylvania counties of Indiana, McKean, Lawrence, and Warren contain such potential "hot spots", as does Cayuga County in New York. The "hot spots" are defined by heat flows 20 mW/m^2 or more above the regional average and are constrained by nearby data points. The surface area of each is approximated to be tens of square kilometers in size. These anomalies warrant a more spatially resolved analysis to better define their potential for EGS development.

There is an inherent level of uncertainty associated with producing gradient and heat flow maps such as those presented here. Apart from the uncertainty associated with the temperature measurements themselves and their corrections, data density is also of primary concern. BHT data points are most concentrated in areas of heavy oil and gas drilling; as a result, there is a highly variable spatial distribution of data points across the study area, ranging from 1 data point in some New York counties (Schoharie and Oneida) to 931 data points in Armstrong County, Pennsylvania. The gridding method used to create each map was selected because of its suitability for density-varying data sets; however, the exact weight given to each data point and its leverage on the overall contouring is uncertain. Anomalies contained completely within the interior of the study area are, therefore, slightly more reliable than those transected by the outer boundary. Hot spot anomalies in areas of dense data are also more reliable than those represented by only one or two data points, and are deserving of future geochemical, geophysical, and drilling investigations.

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CHAPTER 3

STRUCTURAL AND STRATIGRAPHIC HETEROGENEITIES IN THE GEOLOGIC MODEL OF THE APPALACHIAN BASIN OF PENNSYLVANIA AND THEIR EFFECT ON LOW-GRADE GEOTHERMAL RESOURCE ASSESSMENT

3.1 Introduction

The amount of available geothermal energy in a given area is highly dependent on the nature of the surrounding geology. The geology of the northeastern United States is much different in structure and composition from that of the western extensions of the Basin and Ridge province, where most geothermal energy power generation in the United States occurs today. If specific areas are to be selected for investment in acquiring costly data for further evaluation and implementation of EGS, the regions of the highest temperatures and heat flow must be identified with a detailed geologic model of the subsurface.

The previous chapter presents a spatially refined map of surface heat flow in the Appalachian Basin of New York and Pennsylvania based on recently released bottom-hole temperature data and the development of a location-specific thermal conductivity model (Stutz et al., 2012). In order to enable rapid incorporation of data-rich estimates of the depth to temperature for such a large dataset, the regional geology was simplified. Hence the overall thickness of the sedimentary basin was extracted from a revised version of the AAPG's basement map and used to scale regional stratigraphic sections from the AAPG's Correlation of Stratigraphic Units of North America (COSUNA). Likewise, the structure of the basement rock is assumed to be homogeneous, and variations in basement composition and coinciding radiogenic heat generation are poorly understood.

This study is a revision of the geologic model (Figure 2.2), with the intent to produce updated maps of the heat flow and projected temperatures at depth. Its principal focus is on examination of the impact on geothermal energy of a major Pennsylvania (PA) basement structure known as the Rome Trough. Secondary consideration is given to the impacts of

basement intrusions and deep basin fluid flow along the Rome Trough faults, as well as the potential extension of the basement structure into northern Pennsylvania.

The deeply buried Rome Trough is known on the basis of surface lineaments and of Precambrian basement faults identified through seismic analysis which reveal an asymmetrical "half-graben" in southwestern and central Pennsylvania. Across the curved normal fault that defines the eastern boundary of the Rome Trough, an additional 2 kilometers of sandstone and carbonate sediments occur within the sedimentary basin (Ryder et al., 1992). The overall depth to basement across Pennsylvania is remodeled to accommodate for this and other sediment variations due to basement fractures, as well as overlying topographical changes in elevation. Because the northernmost boundary of the Rome Trough fault and the coinciding sedimentary thickness pattern are not well-established, their impacts on geothermal potential in northern PA are also uncertain.

In reviewing the thermal gradient map from Shope et al. (2012) (Chapter 2), a noticeable trend of positive anomalies is located in the area of the Rome Trough (Figure 3.1). The thermal gradient map provides a good initial evaluation of the shallow geothermal resources; the accuracy of the BHTs have been verified with a number of equilibrium wells (Stutz et al., 2012) and it avoids the added uncertainty built into the heat flow map that is caused by use of an average thermal conductivity in the heat flow calculation. The thermal gradient values in Figure 3.1 are representative of the average geothermal resources at 2-3 km depth (the average depths of the wells from which the bottom hole measurements were recorded). The gradient patterns may be caused by convective fluid flow, or variations in basement composition due to intrusion of highly-radiogenic granitic plutons, related to the Rome Trough basement faults. Further extrapolation of the geothermal resources into the rock units at 3 km depth and greater, where the temperatures necessary for direct-use applications (80°C) are expected, are reliant on calculations of projected temperature at depth.

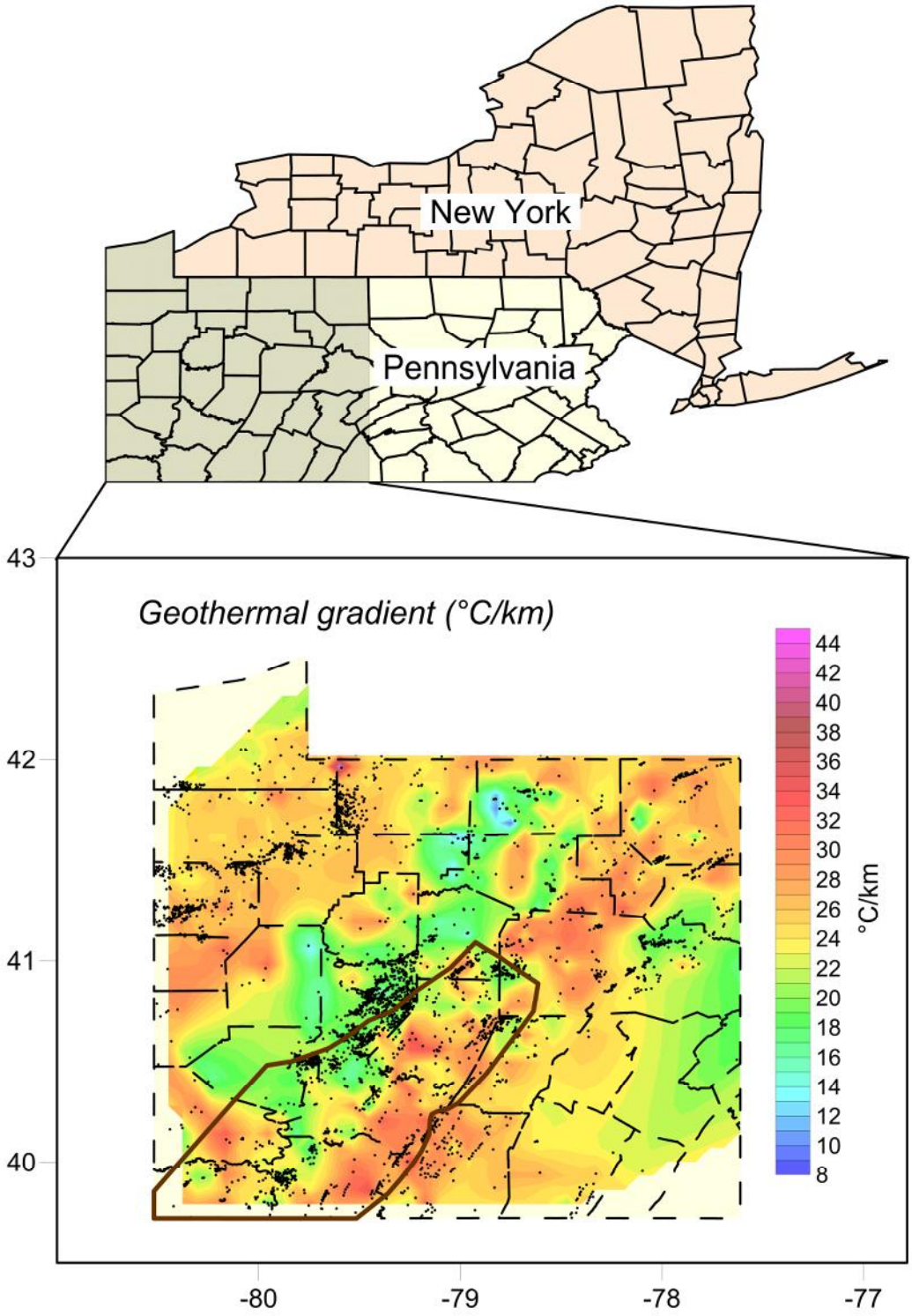

Figure 3.1: Thermal gradient map of the western half of Pennsylvania State. The location of the Rome Trough as defined for this study is outlined in brown; above-average thermal gradient values are present within the trough and along its eastern border. Black points are representative of well locations.

Each individual calculation of projected temperature at depth is dependent on a set of parameters that include the depth of the well, the depth to basement, and the depth at which the temperature is being estimated (Blackwell, 2007; Stutz et al., 2012). These values are used comparatively against one another to select one of 17 possible temperature at depth equations. The potential equations for consideration in this area of study encompass vertical variations in thermal conductivity (sediments at depths greater than 4 km are assumed to have conductivity values equal to that of basement rock) as well as the radiogenic heat contributions from sediment and basement lithologies. A total of 3,748 well data points were evaluated using these equations and gridded to produce a set of maps illustrating the projected temperatures at depths of 1.5, 3.0, 4.5, and 6.0 km in Pennsylvania.

3.2 Background Geology

The Rome Trough is a major feature of Pennsylvania's Precambrian basement structure (Wagner, 1976; Beardsley and Cable, 1983; Harper, 1989) that developed in the Early to Middle Cambrian (Read, 1989) (540 to 500 Ma) as a result of tectonic extension. It is an asymmetrical graben whose deep eastern border is defined by a northeast-striking normal basement fault running through West Virginia into southwestern Pennsylvania (Harper, 1989). The presence of this and other extensional faults in the western half of the state have been determined since the publication of the AAPG basement map based on the methods of seismic interpretation (Beardsley and Cable, 1983; Henderson and Timm, 1985) and analysis of lineaments (i.e., densely populated areas of surface fractures that are indicative of underlying basement structures) (Rodgers and Anderson, 1984). The eastern fault is estimated to have offset the Precambrian basement by 2 to 2.5 km (Ryder et al., 1992), whereas the western edge is identified by smaller, east-dipping normal faults (Kulander and Ryder, 2005) with minor offsets. A recent study by Kulander and Ryder (2005) also suggests that the eastern boundary of the trough is comprised of a group of multiple normal faults dipping to the west, instead of one major structure.

Examination of the depths to key stratigraphic surfaces across the fault zone shows large changes in thickness related to "fault controlled" sedimentation (Wagner, 1976), indicating that the sediments within the Rome Trough were deposited contemporaneous with faulting (i.e., syn-rift; Ryder et al., 1992). The stratigraphy of the units at the eastern boundary of the Rome Trough can be determined to a depth of 6,482 meters based on the Amoco-Svetz No. 1 well (Ryder et al., 1992) drilled in 1974 in Somerset County (Figure 3.2). Those on the western margin are identified down to 4,747 meters with the information gathered from the Martin gas well (Ryder et al., 1992) from 1970 in Armstrong County (Figure 3.2). Correlation of other stratigraphic units in the subsurface outside of the Rome Trough has led to the recent proposal that those units within the trough consist of a basal sandstone unit overlain by formations akin to the Tomstown Dolomite, the Waynesboro Formation, and the Pleasant Hill Formation (Ryder et al., 1992). Above these rocks, strata from the Middle Ordovician and younger show little deformation (Kulander and Ryder, 2005) and maintain the consistent pattern of gradual thickening towards the southeast noted in the simple geological model from Chapter 2.

The location of the faults and the associated increase in sediment thickness in the northern parts of Pennsylvania are uncertain. However, a majority of reports suggest that the full length of the Rome Trough structure runs from Greene to Potter counties (Harper, 2004) (Figure 3.2). Harper (2004) showed that geophysical data agrees with the presence of a trough whose continuity has been offset laterally along a number of basement transform faults. The general projections of the Rome Trough curvature, however, are continuous and mirror that of the Allegheny Structural Front (Figure 3.2). This boundary separates the physiographic provinces of the Allegheny Plateau (west and north) and the Valley and Ridge (south and east), across which geologic structures transition from moderate to high levels of deformation, respectively (Kulander and Ryder, 2005). The two provinces are considered to be a part of the Appalachian Basin, yet heat flow in the Valley and Ridge Province is difficult to model due to structural heterogeneities.

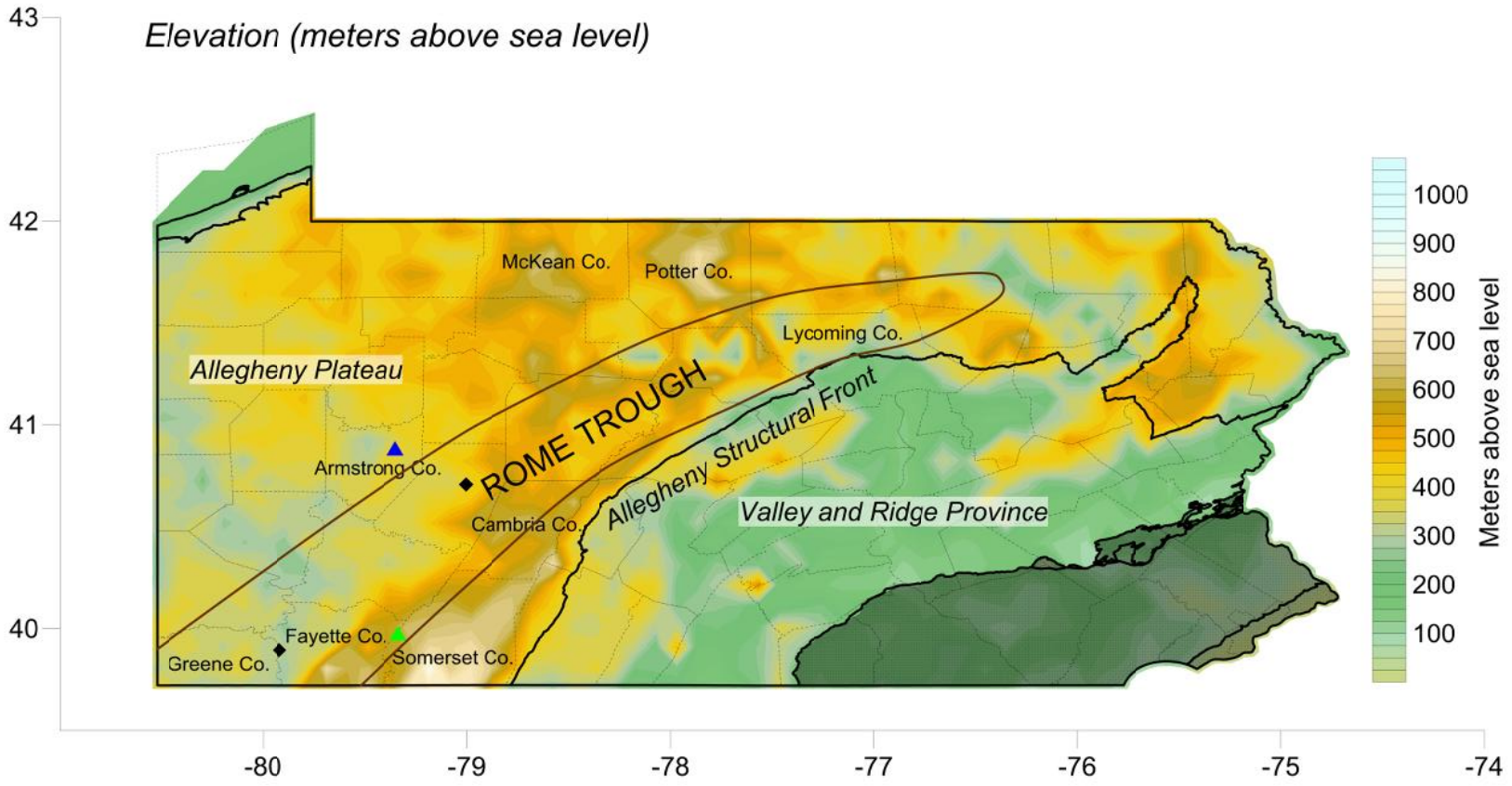

Figure 3.2: Elevation in meters above sea level. Projection of the Rome Trough (outlined in brown) as shown in Repetski (1996). The Amoco-Svetz and Martin well locations are represented by the green and blue triangles, respectively, while kimberlite intrusions are shown as black diamonds. The shaded region is outside of the Appalachian Basin.

The composition of the Grenville basement west of the Allegheny Structural Front consists of metamorphic gneiss and schist (Alexander et al., 2005). As the majority of oil and gas wells do not penetrate basement, Bouguer gravity and magnetic surveys are often the only sources of information from which compositional variations may be predicted. For example, small areas of high magnetic anomalies could be the result of mafic intrusions from the early stages of formation of the Rome Trough (Ryder et al., 1992). Mesozoic-aged kimberlites found in Masontown and Dixonville, PA (Figure 3.2) have been located through surficial exploration; their size (on the order of meters), however, prevents them from appearing on aeromagnetic surveys (Parrish and Lavin, 1982). While these occurrences are evidence of intrusion in an area of crustal faulting, most likely due to reactivation of the faults after the development of the Rome Trough, little data can be deduced on other intrusive bodies until crustal samples are obtained to calibrate the geophysical surveys.

3.3 Methods

The revised map of sediment thickness in the Appalachian Basin of Pennsylvania was developed according to the Precambrian basement contour map from the Pennsylvania State Geologic Survey (Alexander et al., 2005) (Figure 3.3) and the elevation map shown in Figure 3.2. The depths from Figure 3.3 are a measurement from sea level to the underlying basement and range from 4,000 to 8,000 meters, with the greatest values located in the southwestern corner of Pennsylvania (Alexander et al., 2005). No adjustment was needed where the previous map of sedimentary rock thickness (Chapter 2), based on a national compilation (AAPG), agreed with the Pennsylvania State map. The wells within each interval were assigned a depth value equal to the average of their bounding contours and the information was gridded in Surfer (Golden Software) to produce a continuous basement layer. The adjusted depth to basement was then derived for the individual well locations and added to the elevation value from the original well log header to produce a measurement of sediment thickness at each well data point.

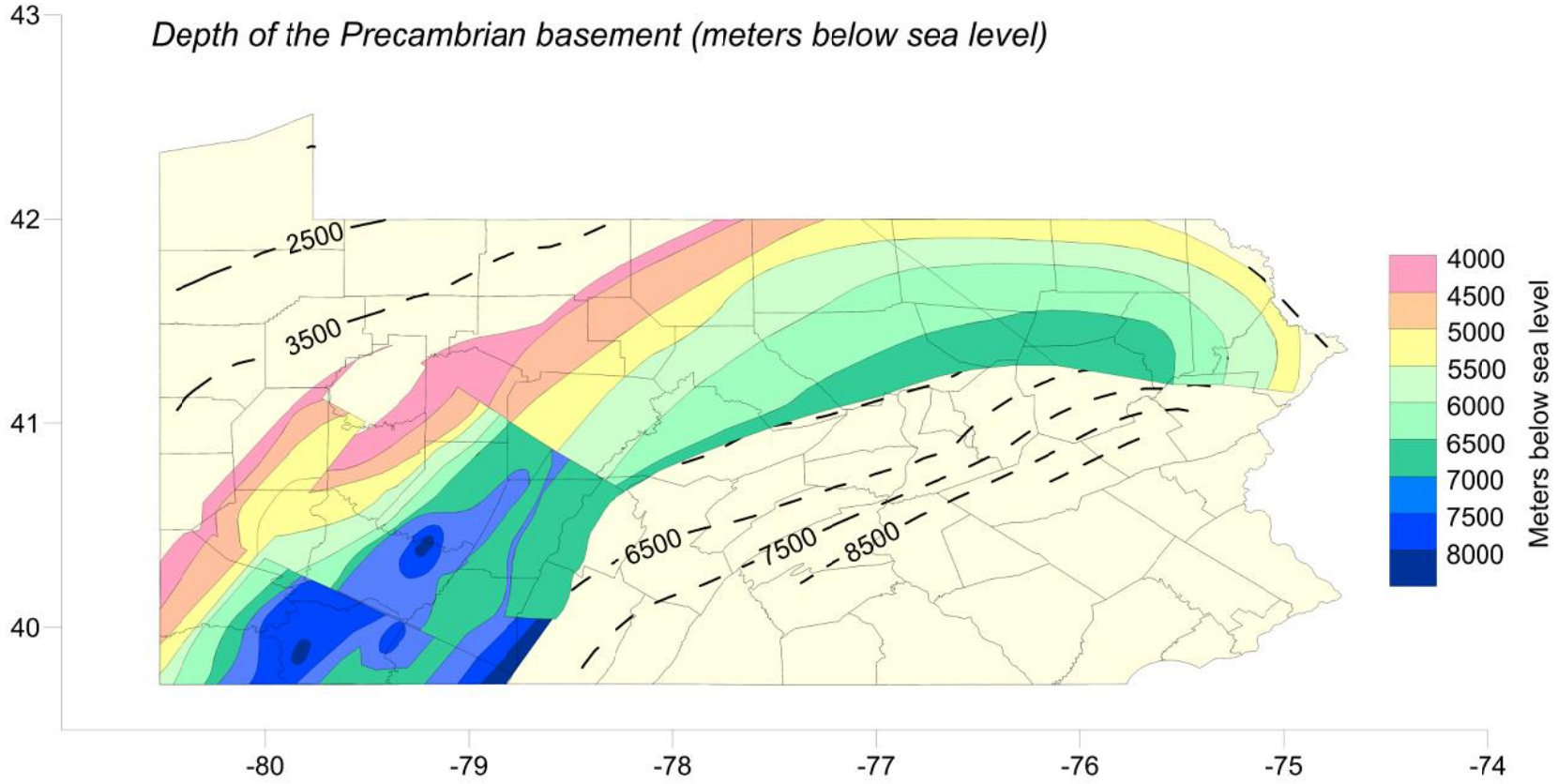

Figure 3.3: Contours of depth to the top of Precambrian basement (depth contours from previous sedimentary model [Shope et al., 2012] outlined by dashed lines) (Alexander et al., 2005).

The location of the Rome Trough as applied in this study (Figure 3.4) is based on the interpretations of Repetski et al. (2008), Rodgers and Anderson (1984), and Kulander and Ryder (2005). Placement of the eastern fault begins in Fayette County and follows the northeastern trend of basement fractures along the borders of Somerset and Cambria counties (Figure 3.4). The western border of the trough was outlined according to the 5.5 km basement depth contour from the Pennsylvania State Geologic Survey (Figure 3.3); the boundary aligns with the known extension of the trough in northeastern West Virginia and closely follows its curved projection (Kulander and Ryder, 2005). The Tyrone-Mt. Union Lineament forms the northern extent of the half-graben (Figure 3.4), beyond which the sediment thickness is believed to decrease by 1 to 1.5 km (Rodgers and Anderson, 1984; Alexander et a., 2005) and becomes more difficult to model due to uncertainty regarding the location of the basement faults and the exact thickness of the overlying sediments.

As in the previous chapter, a regional stratigraphic column based on COSUNA was used to calculate a weighted average of the lithology-specific thermal conductivity values over the depth of each well. For this study, the stratigraphic column applied to wells in the Rome Trough was reconstructed to include an additional 1.5 km of sediment at the base. This value is a conservative estimate in comparison to the additional 2 km along the trough axis proposed by Ryder et al. (1992) and was chosen based on the distribution of depths across the eastern fault in the Precambrian basement structure (Figure 3.3). Given the depth at which the lower trough lithologies are present, the methodology for calculations of heat flow and of temperature at depth considers all units below 4 km to have conductivities equivalent to that of basement rock, which in this study was assumed to be a constant value of 2.7 W/m·K. This value corresponds to what would be expected as a result of increased temperatures and pressures (Blackwell et al., 2007). All formations at depths shallower than 4 km were given the lithology-specific thermal conductivity values as applied in the previous chapter.

In order to prevent a mis-weighted distribution of the sediment conductivities at depths shallower than 4 km while adding 1.5 km to the bottom of the stratigraphic column, the base of

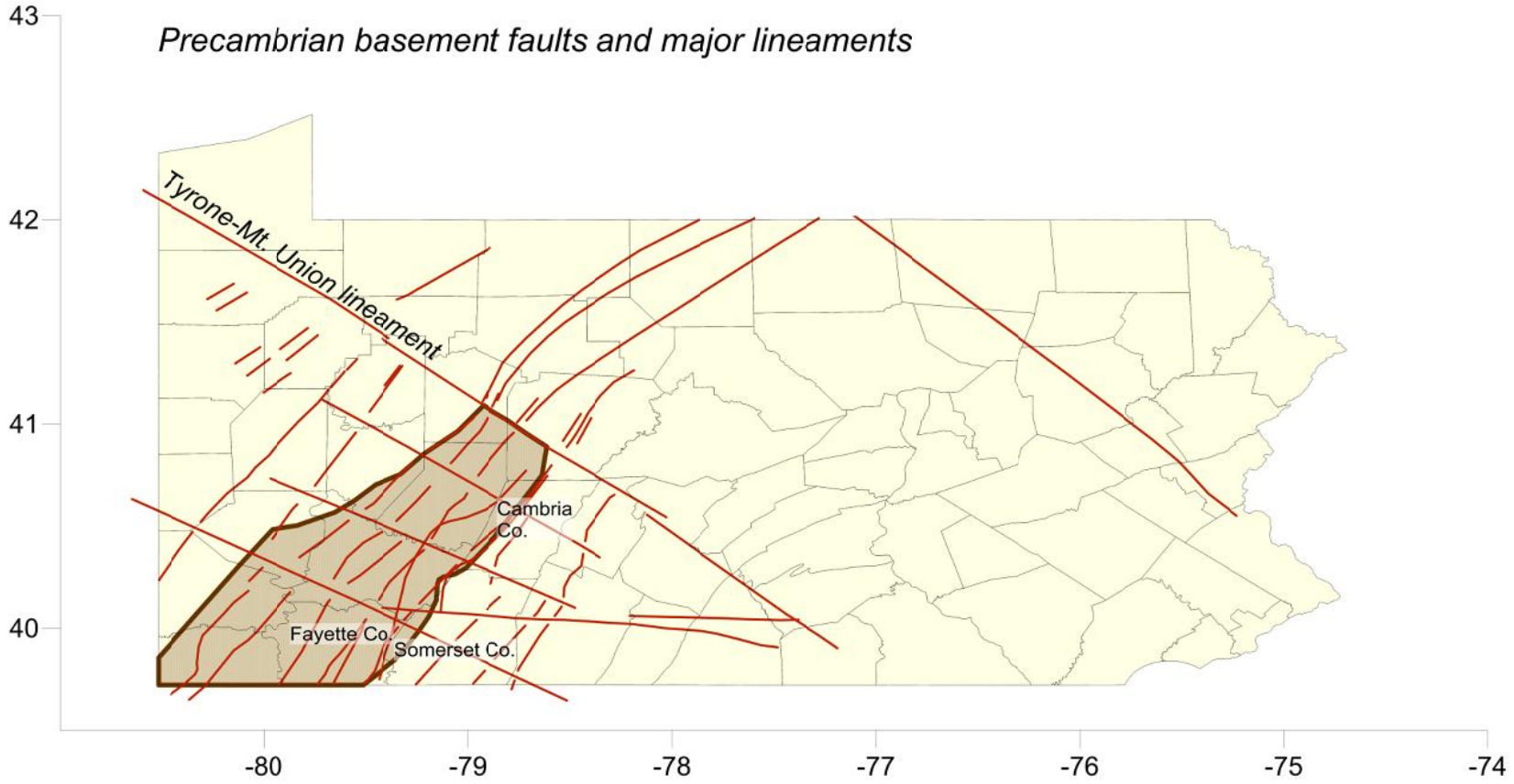

Figure 3.4: Precambrian basement faults and major lineaments used to identify the location of the Rome Trough (Alexander et al.,2005). The area defined as the Rome Trough for this study is shaded in brown.

the Knox Formation (TBR Project, 2006) (or its local equivalent, the Gatesburg Formation) was used as an intermediate layer to constrain the scaling of the units for all wells located in the Rome Trough (Figure 3.5). It is the second deepest formation overlying the units within the Rome Trough. Depth intervals for the Knox/Gatesburg Formation were mapped, gridded, and assigned to specific well locations in the same manner as the revised sedimentary model. For each well location, the average thickness of the stratigraphic column from the surface to the base of the Gatesburg Formation was scaled to fit the constraining depth (Tables 3.1 and 3.2). The lower column (representing those units in the trough) was then scaled to fit the remaining distance from the base of the Gatesburg Formation to the interpolated depth to Precambrian basement.

Values of heat flow and of temperature at specific depths of interest were produced with the methodology described in Shope et al. (2012) and Stutz et al. (2012). Assuming one dimensional conductive heat transfer and a constant thermal gradient with depth, the heat flow in mW/m^2 is calculated to be the product of the average thermal conductivity over the depth of the well and the Harrison-corrected thermal gradient. Temperatures at 1.5, 3.0, 4.5, and 6.0

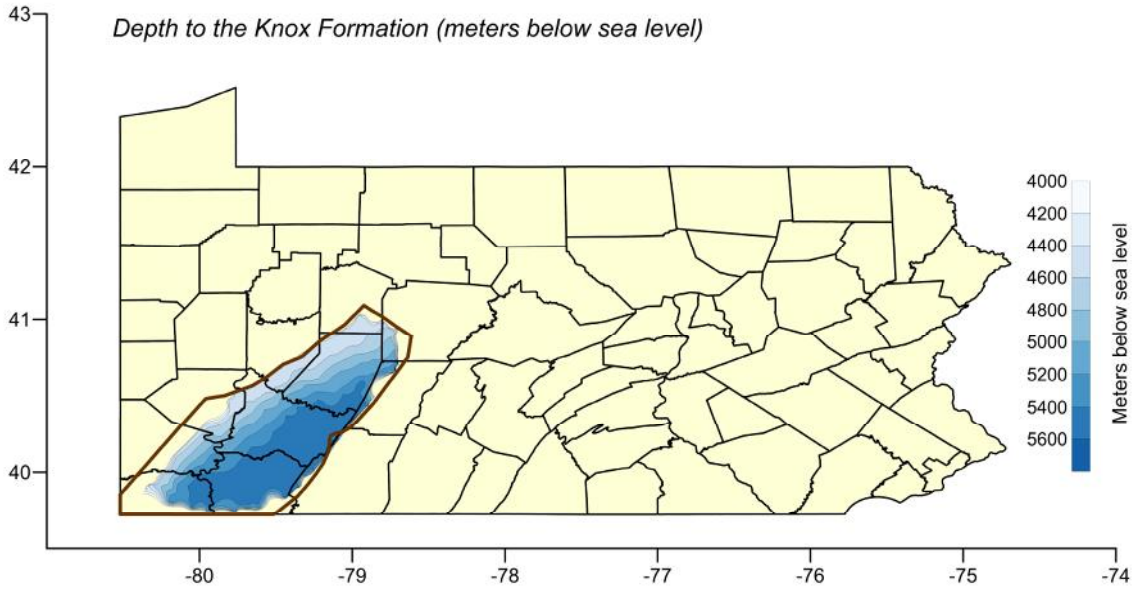

Figure 3.5: Depth of the base of the Knox (TBR Project, 2006) (interpreted here as the Gatesburg Formation) with the Rome Trough outlined in brown.

Table 3.1: Revised stratigraphic column for the Rome Trough (units in boldface are formations added to the original COSUNA Section 17 (Orlo et al., 1985)).

Unit	Average Thickness (m)	Conductivity (W/m·K)
Unnamed sandstone	220	3.34
Monogahela OR Uniontown/Pittsburgh	91	2.22
Conemaugh OR Casselman/Glenshaw	264	1.60
Allegheny	85	2.91
Pottsville	59	3.25
Mauch Chunk	139	2.15
Greenbrier	36	3.10
Burgoon/Rockwell OR Shenango	194	2.91
Venango OR Catskill OR Hampshire	471	3.17
Chadakoin/Bradford OR Lock Haven	530	3.05
Brallier	879	2.25
Harrell	140	1.02
Tully	20	2.45
Mahantango	73	1.98
Marcellus	37	1.52
Selinsgrove	5	2.45
Huntersville	32	2.33
Needmore	7	2.12
Ridgeley	30	3.42
Licking Creek OR Shriver	26	2.08
Mandata	7	1.43
Corriganville	3	2.45
New Creek	3	2.45
Keyser Formation	27	2.45
Tonoloway	21	2.31
Wills Creek	176	2.26
Lockport OR McKenzie	50	1.90
Clinton Group	162	2.51
Tuscarona Formation	89	4.60
Queenston OR Juniata/Bald Eagle	389	3.34
Reedsville	233	2.15
Antes Formation	54	1.72
Coburn Formation	75	2.50
Salona Formation	39	2.01
Nealmont	78	2.50
Benner	45	2.70
Snyder	27	3.35
Hatter	48	3.35
Loysburg	43	3.35
Beekmantown Group	678	3.35
Gatesburg	289	3.35
Warrior Formation	134	3.35
Pleasant Hill	242	2.31
Waynesboro	303	2.51
Tomstown	500	3.40
Unnamed sandstone	500	3.40

kilometers were then projected using one of 17 possible equations of temperature at depth (Blackwell et al., 2007; Stutz et al., 2012). The appropriate equation for an individual well incorporates constant values of mantle heat flow (30 mW/m^2), basement and deep sediment conductivity (2.7 W/m·K), and sediment radiogenic heat generation (1 μW/m^3), along with an average surface temperature of 9°C, the calculated heat flow output and (in some cases) a calculated basement radiogenic heat generation, to solve for the final temperature at depth.

The complexity of the heat flow and radiogenic heat variations and the characteristics of the well data within the Rome Trough fit two of the parameters defined in the temperature equation selection: depth of the basement is greater than 4 km, and the depth of a given well (and its corresponding BHT) is shallower than the basement. The third parameter is dependent on the depth to which the temperatures are projected and its location in either sediment or basement rock, as shown in Equations 3.1 and 3.2, respectively.

$$T(Z) = T_S + \left|\frac{Q_S Z_W}{K_{avg}} - A_s \frac{Z_W^2}{2K_{avg}}\right| + \left|\frac{Q_S (4 - Z_W)}{K_{bb}} - A_s \frac{(4 - Z_W)^2}{2K_{bb}}\right| + \left|\frac{(Q_S - A_s)(X - 4)}{K_{sed>4km}} - A_s \frac{(X - 4)^2}{2K_{sed>4km}}\right| \quad (3.1)$$

$$T(Z) = T_S + \left|\frac{Q_S Z_W}{K_{avg}} - A_s \frac{Z_W^2}{2K_{avg}}\right| + \left|\frac{Q_S (4 - Z_W)}{K_{bb}} - A_s \frac{(4 - Z_W)^2}{2K_{bb}}\right| + \left|\frac{(Q_S - A_s)(Z_B - 4)}{K_{sed>4km}} - A_s \frac{(Z_B - 4)^2}{2K_{sed>4km}}\right| + \left|\frac{Q_m (X - Z_B)}{K_B} + A_B (b)^2 \left[\frac{1 - e^{\frac{X - Z_B}{b}}}{K_B}\right]\right| \quad (3.2)$$

Equation 3.1 is applicable for the wells within the Rome Trough, as the depths of projected temperature up to 6.0 km are located in sedimentary rocks. Equation 3.2 is representative of the projected temperature at depth calculation in the absence of the lower four sedimentary units. Four example wells proximal to a group of four equilibrium wells, all of which are within the Rome Trough (Figure 3.6), were used to compare the variation in temperature output between

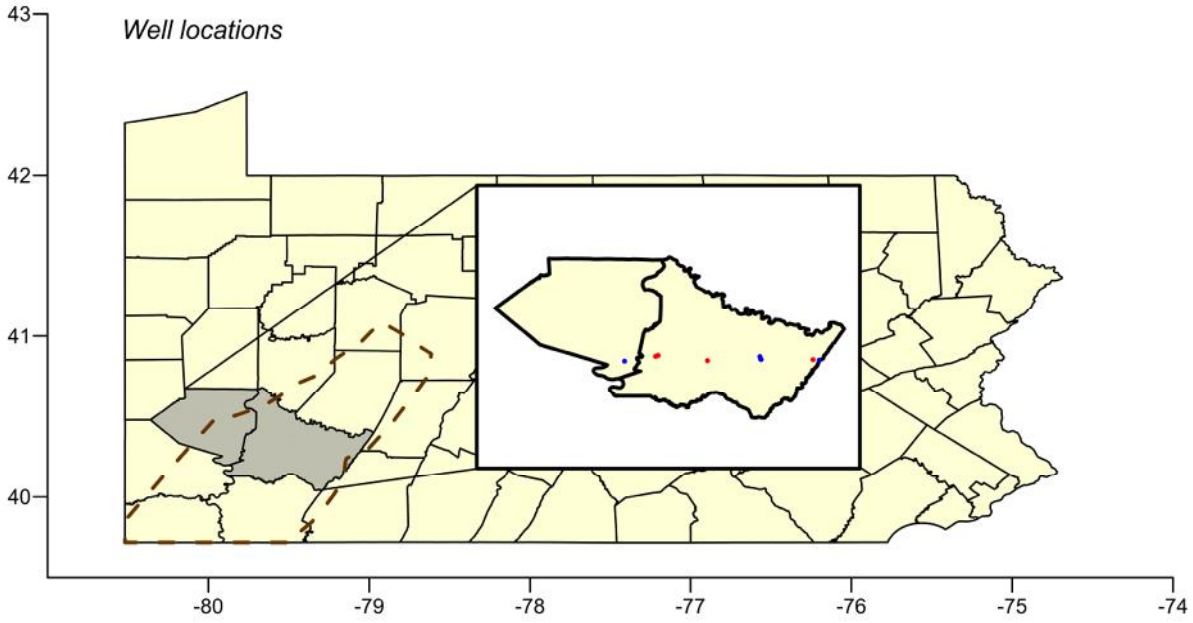

Figure 3.6: Location of the equilibrium wells (in blue) and example wells (in red) for comparison of the change in projected temperatures at 6 km depth due to the addition of sediments within the Rome Trough.

the two equations; the results at 6 km depth are shown in Table 3.2.

The apparent basement radiogenic heat generation (A_b) (Table 3.2) is derived from Equation 3.3 on a well-by-well basis, where Q_s is surface heat flow, Q_m is mantle heat flow, A_s is the radiogenic heat generation from the sediments, Z_s is the thickness of the sediments, and b is the thickness of the basement rock contributing a significant amount of radiogenic heat.

$$A_b = (Q_s - Q_m - A_s Z_s) / b \tag{3.3}$$

As a first approximation, the value of b in the geologic model of the sedimentary basin was set to 10,000 meters for areas with sediment thickness less than 3 km; otherwise b was equivalent to the difference between 13,000 meters and the sediment thickness (Equation 3.4) (Blackwell et al., 2007; Stutz et al. 2012).

Table 3.2: Projected temperatures at 6 km depth for four example wells within the Rome Trough. The upper data set is representative of the methodology used to produce the revised heat flow map, in which the depth of the Knox/Gatesburg Formation acts as a constraint on the scaling of the stratigraphic column (Equation 2.1). The total sedimentary thickness is derived from the revised geologic model. The lower data set illustrates the temperature calculations in the absence of the lowermost Rome Trough units, where the depth of the Knox/Gatesburg Formation is assumed to be the equivalent of the total sedimentary thickness (Equation 2.2). Apparent basement radiogenic heat generation is calculated from Equations 3.3 and 3.4.

Identifier (API/Name)	BHT (°C)	Well Depth (m)	Mantle Heat Flow (mW/m2)	Depth to Basement (m)	Avg. Surface Temperature (°C)	Sediment Radiogenic Heat Generation ($\mu W/m^3$)	Apparent Basement Radiogenic Heat Generation ($\mu W/m^3$)	Gradient (°C/km)	Heat Flow (mW/m2)	Average Conductivity To Well Depth (W/m/K)	Temperature Estimation at 6 km (°C)	Constraint (m)
37129247300000	34	1201	30	6277	9	1.0	2.42	21	53	2.50	133	5022
37129239710000	66	2207	30	7780	9	1.0	5.57	26	67	2.60	170	5410
37129203880000	89	2547	30	7538	9	1.0	7.73	31	80	2.55	200	5403
37129245160000	37	1252	30	6274	9	1.0	3.02	22	57	2.52	142	5028

Identifier (API/Name)	BHT (°C)	Well Depth (m)	Mantle Heat Flow (mW/m2)	Depth to Basement (m)	Avg. Surface Temperature (°C)	Sediment Radiogenic Heat Generation ($\mu W/m^3$)	Apparent Basement Radiogenic Heat Generation ($\mu W/m^3$)	Gradient (°C/km)	Heat Flow (mW/m2)	Average Conductivity To Well Depth (W/m/K)	Temperature Estimation at 6 km (°C)
37129247300000	34	1201	30	5022	9	1.0	2.23	21	53	2.50	131
37129239710000	66	2207	30	5410	9	1.0	4.11	26	67	2.60	166
37129203880000	89	2547	30	5403	9	1.0	5.80	31	80	2.55	197
37129245160000	37	1252	30	5028	9	1.0	2.74	22	57	2.52	141

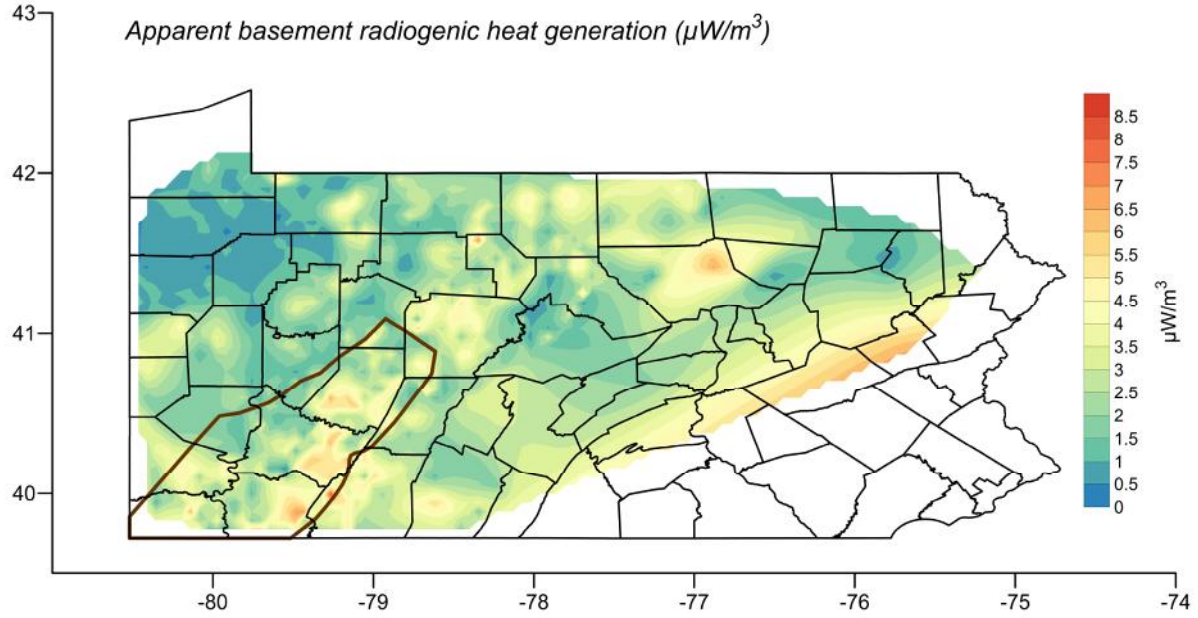

Figure 3.7: Apparent basement radiogenic heat generation in μW/m^3 as determined from Equations 3.3 and 3.4. Values greater than 4 μW/m^3 are unrealistic. The location of the Rome Trough is outlined in brown.

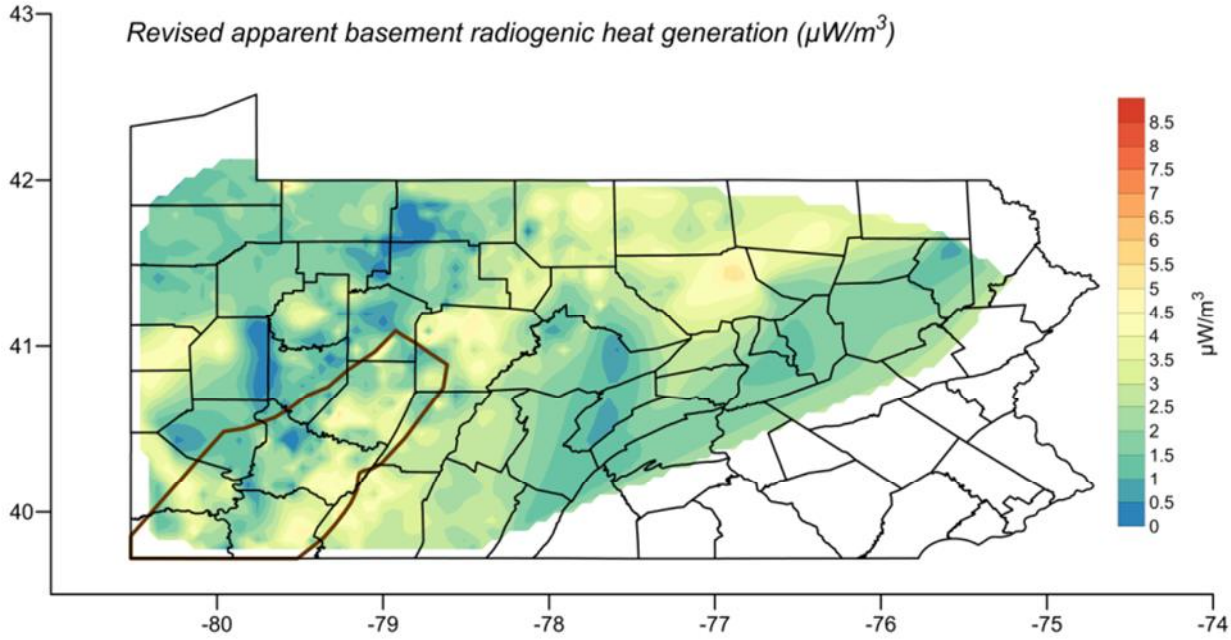

Figure 3.8: Revised apparent basement radiogenic heat generation in μW/m^3 as determined from Equation 3.3 and an assumed constant b value of 10 km. The location of the Rome Trough is outlined in brown.

$$\text{For } Z_s < 3000 \text{ m}, \; b = 10{,}000 \text{ m} \qquad (3.4)$$
$$\text{For } Z_s \geq 3000 \text{ m}, \; b = 13{,}000 \text{ m} - Z_s$$

Expected values of b are between 7.5 and 10 km (Blackwell, 1971; Roy et al., 1968). Application of Equations 3.3 and 3.4 resulted in the distribution of apparent basement radiogenic heat generation shown in Figure 3.7. The values of basement radiogenic heat generation greater than 4 $\mu W/m^3$ are likely incorrect, however, as highly-radiogenic granites produce 2.8 $\mu W/m^3$ on average (Cermak et al., 1990).

Equation 3.4 is intended for areas where the basement has been thinned due to crustal extension, a situation expected in rift basins. However, many sedimentary basins with a thick sedimentary rock cover possess a normal-thickness crust. This would be the expectation of foreland basins, like the Appalachian basin. Consequently, for the Pennsylvania study area, the apparent basement radiogenic heat generation is reanalyzed for a case of a normal-thickness radiogenic crust, assuming that the basement thickness b is 10,000 meters across the entire study area. Figure 3.8 illustrates this revised apparent basement radiogenic heat generation, indicating that a constant b value may be more appropriate, as extension and thinning were not characteristic of Pennsylvania's recent geologic history.

3.4 Discussion

3.4.1 Heat Flow and Projected Temperatures at Depth

As seen in Table 3.3, the average value of surface heat flow in the Appalachian Basin of Pennsylvania does not change more than a few degrees from the map presented in the previous chapter. The altered distribution of the areas of higher than average heat flow, however, is evident between the two maps in Figure 3.9. The general increase in sediment thicknesses across the state as a result of the revised depth to basement and elevation addition (Figures 3.2 and 3.3) changes the distribution of the formations in the upper 4 km of sediments. These formations

dictate the stratigraphically-weighted average thermal conductivity and resulting heat flow at each well location. This emphasizes the importance of detail within the upper 4 km of the stratigraphic column; larger units should be broken down into as much compositional detail as possible in order to best represent the average thermal conductivity over the depth of the well. Areas of heat flow greater than 65 mW/m^2 are mapped throughout central and smaller parts of western Pennsylvania (Figure 3.9). More detail is required in areas of sparse data in order to constrain the gridding of the heat flow contours, especially in the locations where heat flows exceeding 75 mW/m^2 are inferred.

The projected temperatures shown by the maps in Figure 3.10A and 3.10B, calculated using the revised heat flow model (Figure 3.9) indicate that those temperatures necessary for thermal direct use (>80°C as defined by Fox et al. (2011)) are available at depths of 4.5 to 6 km (Table 3.3). As noted in the previous chapter, 6 km is considered to be the greatest depth at which drilling is economically viable. Areas in the 6 km depth map (Figure 3.10B) representative of temperatures greater than 150°C are supported by high density well data. Additional confidence can be derived from the Amoco-Svetz and Martin wells in Figure 3.2; the two wells are the deepest in the state and have corrected bottom-hole temperatures of 146°C at 6,482 meters and 132°C at 4,746 meters, respectively. Each of the two wells' predicted temperature at its respective bottom hole depth and spatial location is within one degree of the corrected BHT value (Table 3.4). Unlike the temperatures predicted using the simple geologic model (Table 3.4A), the temperatures predicted by the revised model of sediment thickness approximate the Harrison-corrected BHTs accurately (Table 3.4B). Thus the temperatures

Table 3.3: Averages and standard deviations of heat flow and temperatures at depth from all Pennsylvania wells (Figures 3.9 and 3.10).

	Heat Flow (mW/m^2)	Temperature at 1500 m (°C)	Temperature at 3000 m (°C)	Temperature at 4500 m (°C)	Temperature at 6000 m (°C)
Average	54	42	76	109	137
Std. deviation	13	7	14	24	31

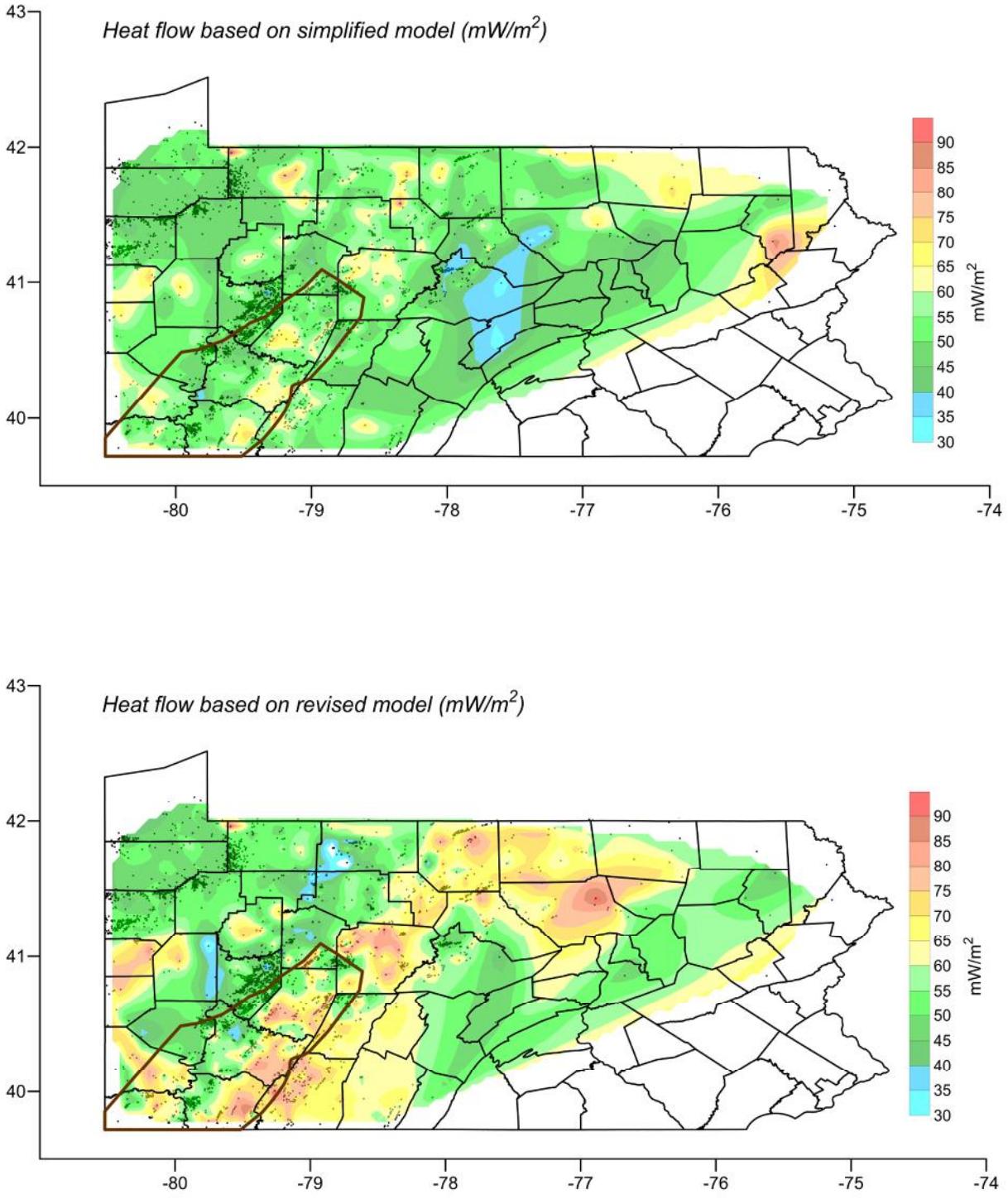

Figure 3.9: Heat flow for the Appalachian Basin of Pennsylvania as determined using the simplified geologic model (top) and the revised model (bottom). Black points are representative of well data locations; the location of the Rome Trough is outlined in brown. The enlarged revised model heat flow map can be viewed in Appendix A.

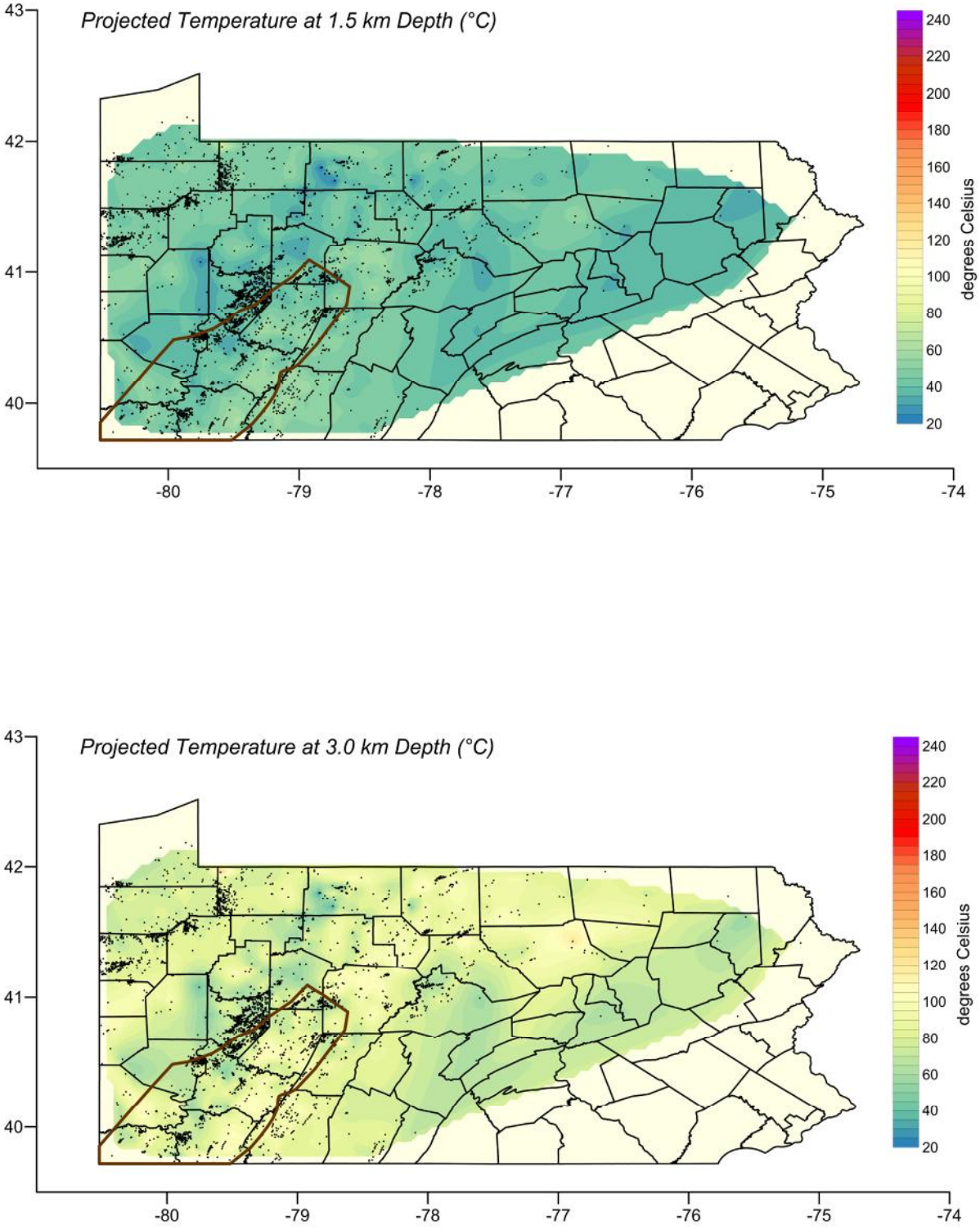

Figure 3.10A: Projected temperatures at depths of 1.5 and 3.0 km using the revised heat flow model. The location of the Rome Trough is outlined in brown.

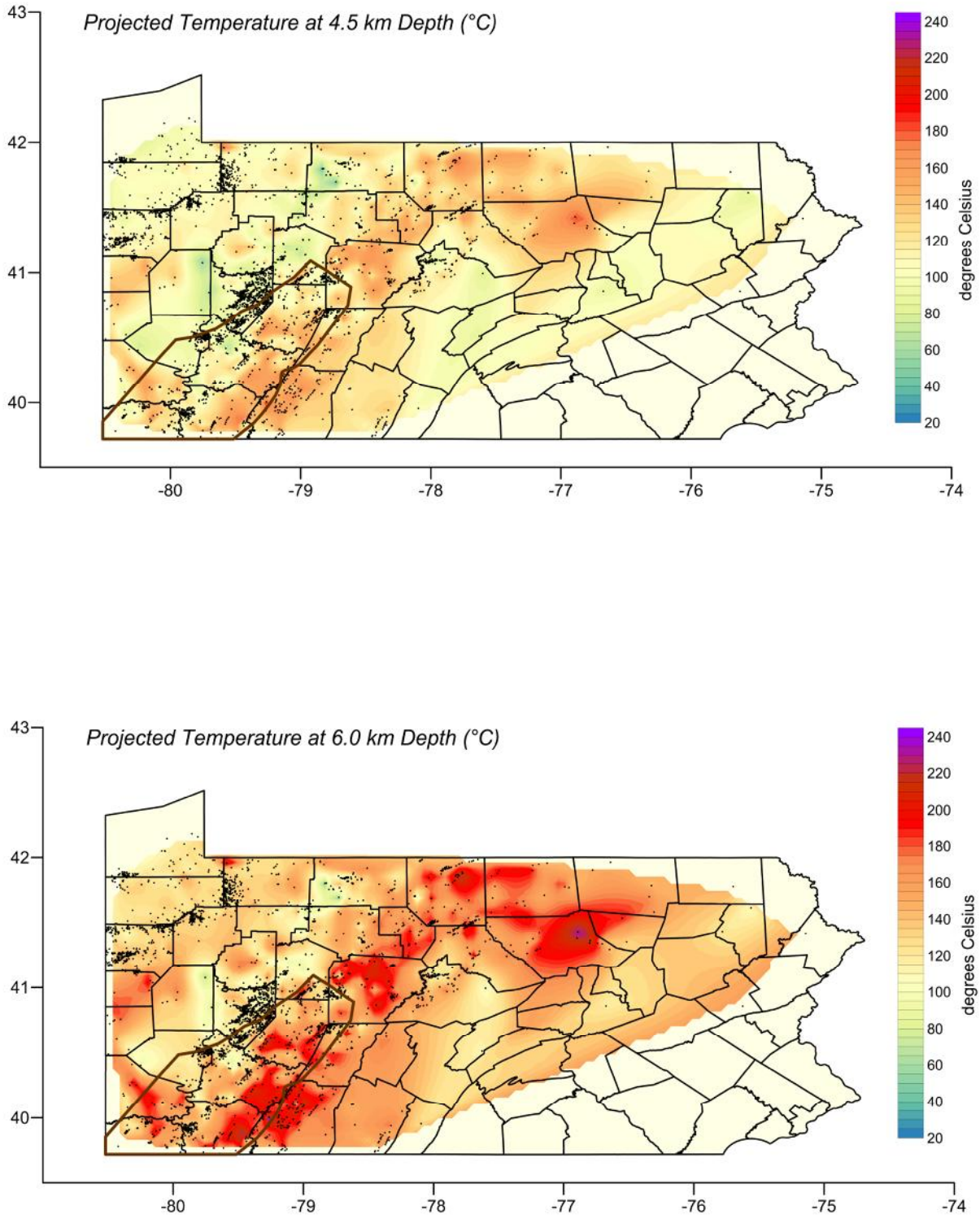

Figure 3.10B: Projected temperatures at depths of 4.5 and 6.0 km using the revised heat flow model. The location of the Rome Trough is outlined in brown.

Table 3.4: Comparison of the bottom hole and projected temperatures at depth for theAmoco-Svetz (API # 37111200450000) and Martin (API # 37005212010000) wells using the simplified geologic model (A) from Chapter 2 and the revised model (B) from Chapter 3. The revised model estimates the bottom hole temperature to within one degree of the Harrison-corrected BHT for both wells.

A. Simplified model

Identifier (API/Name)	BHT (°C)	Well Depth (m)	Mantle Heat Flow (mW/m2)	Depth to Basement (m)	Avg. Surface Temperature (°C)	Sediment Radiogenic Heat Generation ($\mu W/m^3$)	Apparent Basement Radiogenic Heat Generation ($\mu W/m^3$)	Gradient (°C/km)	Heat Flow (mW/m2)	Average Conductivity To Well Depth (W/m/K)	Temperature Estimation at Well Depth (°C)	Depth to BHT Isotherm (m)
37111200450000	146	6482	30	5545	9	1	2.53	21	54	2.57	161	5703
37005212010000	132	4747	30	4073	9	1	3.64	26	67	2.57	144	4358

B. Revised model

Identifier (API/Name)	BHT (°C)	Well Depth (m)	Mantle Heat Flow (mW/m2)	Depth to Basement (m)	Avg. Surface Temperature (°C)	Sediment Radiogenic Heat Generation ($\mu W/m^3$)	Apparent Basement Radiogenic Heat Generation ($\mu W/m^3$)	Gradient (°C/km)	Heat Flow (mW/m2)	Average Conductivity To Well Depth (W/m/K)	Temperature Estimation at Well Depth (°C)	Depth to BHT Isotherm (m)
37111200450000	146	6482	30	8490	9	1	3.34	21	54	2.53	145	6528
37005212010000	132	4747	30	5074	9	1	3.77	26	65	2.51	132	4761

illustrated in Figure 3.10 are considered to be good indicators of the deep geothermal resources.

Examination of the heat flow and projected temperatures at depth within the Rome Trough area outlined in this study show the highest values to be found along the eastern edge of the Trough, both within the Trough and adjacent to it (Figures 3.9 and 3.10). Frone and Blackwell (2010) presented a similar result from the southern extension of the Rome Trough in northern West Virginia, in which higher temperatures were calculated over the eastern upland horst. The cause of similar anomalies in southern Pennsylvania may be due to a number of geological factors, including the presence of deep basin fluid flow and changes in basement composition as discussed below. The lowermost sedimentary units in the Rome Trough do not appear to impact projected temperatures at depth by more than a few degrees (Table 3.2) as a result of the added sediment radiogenic heat. Heat flow calculations for each of the four wells remained constant, proving that the use of the Knox/Gatesburg Formation as a means to maintain stratigraphic scaling is valid.

3.4.2 Basement Radiogenic Heat Generation and Characteristic Thickness

The lack of detailed information about the composition of the Precambrian basement is one of the greatest obstacles involved in the exploration of low grade geothermal resources in Pennsylvania and New York. While sedimentary thermal conductivity values can be obtained from well cores, and cores and cuttings are available for many boreholes over the region (although not accessible for this study), there are limited basement samples with which to examine the variance of thermal conductivity and radiogenic heat generation in the crystalline basement. The presence of granitic intrusions within the Precambrian rock could be responsible for the distribution of positive heat flow anomalies within the Rome Trough. Parrish et al. (1982) proposed that the northeastern alignment of the kimberlite intrusions in Pennsylvania is due to reactivation of the faults along zones of crustal weakness. While the kimberlites themselves are not large enough to generate a significant amount of heat (Repetski et al., 2008), it is possible that other intrusions followed a similar spatial pattern.

Maps of the apparent basement radiogenic heat generation (A_b) in Pennsylvania are shown in Figures 3.7 and 3.8. Cermak et al. (1990) estimated the radiogenic heat generation of granites to be approximately 2.8 $\mu W/m^3$ with a standard error of 1 $\mu W/m^3$, in comparison to the reduced levels of 0.1 and 0.01 $\mu W/m^3$ from mafic rock compositions. Given the higher-than-expected radiogenic levels of 4 to 8 $\mu W/m^3$ shown in Figure 3.7, it is likely that Equation 3.4 is not an appropriate representation of the thickness of the radiogenic basement in Pennsylvania. Instead, the assumption that there is a constant thickness of 10 km of basement rock contributing a meaningful amount of radiogenic heat over the study area results in more reasonable levels of radiogenic heat generation (<4 $\mu W/m^3$), as illustrated by Figure 3.8. Areas where the apparent value of A_b is zero coincide with the location of shallow wells, many of which are just below the cutoff of 600 meters and may be influenced by groundwater movement.

As evident in Figure 3.8, there are high levels of apparent basement radiogenic heat generation located in the Rome Trough. It is probable that the extensional nature of the Rome Trough through time has resulted in the intrusion of granitic plutons that would contribute higher levels of radiogenic heat. In order to identify the presence of radiogenic bodies, basement samples are needed to calibrate the geophysical survey measurements. From that, gravity and magnetic surveys could be utilized to further understand the potential contribution of radiogenic heat from the basement lithology. The rocks samples would also then be able to verify the basement conductivity values assigned in this study.

3.4.3 Deep Basin Fluid Flow

Another possible cause for the distribution of the positive heat flow anomalies within and along the Rome Trough is the movement of groundwater through the lowermost units of the basin stratigraphy where, at depths greater than 4.5 km, the rock and fluids are expected to reach temperatures over 100°C. While few studies have presented data pertinent to the present-day conditions of fluid migration in the Appalachian Basin, anticipated fluid velocities in the deeper regions of the basin may be compared to a basic calculation of advective heat transport to

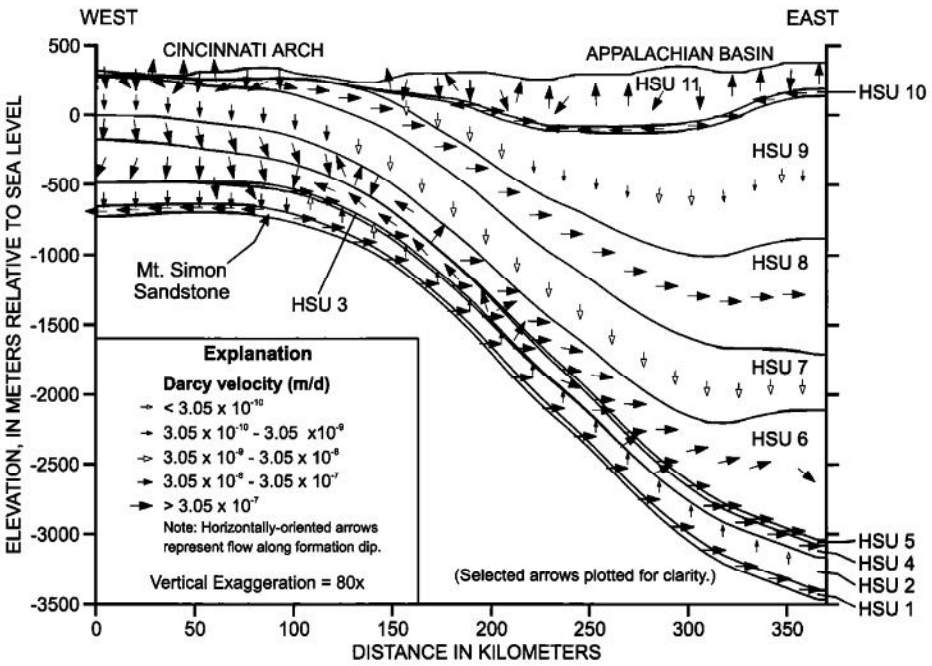

Figure 3.11: Darcy velocities of proposed deep basin fluid flow (reprinted from Gupta and Bair, 1997). Each hydrostratigraphic unit (HSU) is comprised of a group of sedimentary formations with similar hydrological characteristics (Gupta and Bair, 1997).

evaluate the potential amount of advective heat flow. Gupta and Bair (1997) present a 3D steady-state, finite difference flow model of groundwater movement based on specific-gravity data, core analyses, fluid pressure data, and hydraulic conductivity data from a large number of wells across Illinois, Indiana, Ohio, and the westernmost part of Pennsylvania. Boundary conditions varied for each hydrostratigraphic unit (HSU) based on the amount of available data (Gupta and Bair, 1997). The resulting Darcy velocities (Figure 3.11) suggest that at least 50% of the HSUs at depths greater than 1 km below sea level contain fluids migrating east into the Appalachian Basin. Fluid flow in the deeper units is believed to be largely controlled by regional structures instead of variations in elevation, as expected for shallow groundwater (Gupta and Bair, 1997).

The magnitude of advective heat transport due to compactionally driven fluid flow in deeply buried sedimentary rocks is explained in Allen and Allen (2005): applying the parameters

shown in Table 3.5 to Equation 3.5, a pore fluid velocity of 10^{-11} m/s results in a lateral heat flow of approximately 2 mW/m^2.

$$\frac{\delta T}{\delta t} = \frac{1}{c_r \rho_r}\left\{K_r \frac{\delta^2 T}{\delta y^2} + A + c_f \rho_f \phi v_f \frac{\delta T}{\delta y}\right\} \quad (3.5)$$

Based on the highest Darcy velocities presented by Gupta and Bair (1997) (approximately 10^{-12} m/s), it is unlikely that the temperature anomalies seen in the Rome Trough are due to advective fluid movement. However, fluid flow could be increased through fractures in the sedimentary units along the deep eastern portion of the Rome Trough. Changes in the formation geometries to the east could also result in enhanced velocities, causing the fluid to rise over the neighboring uplifted Rome Trough footwall and produce the high temperature anomalies seen in the previous maps. Further investigation of the hydrostratigraphic units in this area is necessary in order to determine the velocities of deep groundwater movement. If the values increase by an order of magnitude and are large enough to significantly alter the heat flow, there may be vertical thermal gradient isotherms within the basin units.

Table 3.5: Typical values for a volume of sedimentary rock buried at depth within a sedimentary basin (reprinted from Allen and Allen, 2006).

Parameter	Notation	Typical value	Units
Rock volume density	ρ_r	2500	kg m^{-3}
Rock volume bulk thermal conductivity	K_r	3	W m^{-1} K^{-1}
Rock volume heat capacity	c_r	1 x 10^3	J kg^{-1} K^{-1}
Pore fluid density	ρ_f	1000	kg m^{-3}
Pore fluid heat capacity	c_f	4.185 x 10^5	J kg^{-1} K^{-1}
Pore fluid velocity*	v_f	10^{-13}- 10^{-9}	m s^{-1}
Rock volume porosity	Φ	0.1	
Internal heat generation	A	1.25 x 10^{-6}	W m^{-3}
Formation and pore fluid temperature	T	373	K

3.4.4 Northern Extensions of the Rome Trough

If the map of thermal gradient (Figure 3.1) is any indication of the relationship between the location of the Rome Trough and the areas of high geothermal resource potential, it is likely that the Rome Trough extends north into Potter and Tioga counties along the projection shown in Figure 3.12. Ryder (1992) suggests that a series of alternating basins and arches, separated by normal faults, branch off of the main Rome Trough, following the broad lateral distribution of high gradient anomalies across central northern Pennsylvania (Figure 3.12). The vertical offsets of the intermediate faults have not been clarified by independent data sources (i.e., lineaments and seismic reflection profiles) and therefore this potential northern extension was not evaluated for this study. As the additional 1.5 kilometers of sediment in the lowermost portion of the Rome Trough did not change the projected temperatures at depth by more than a few degrees Celsius (Table 3.2), the potential northern extension of the Trough is not expected to alter the maps of heat flow and temperatures at depth shown in this study. However, in the situation that

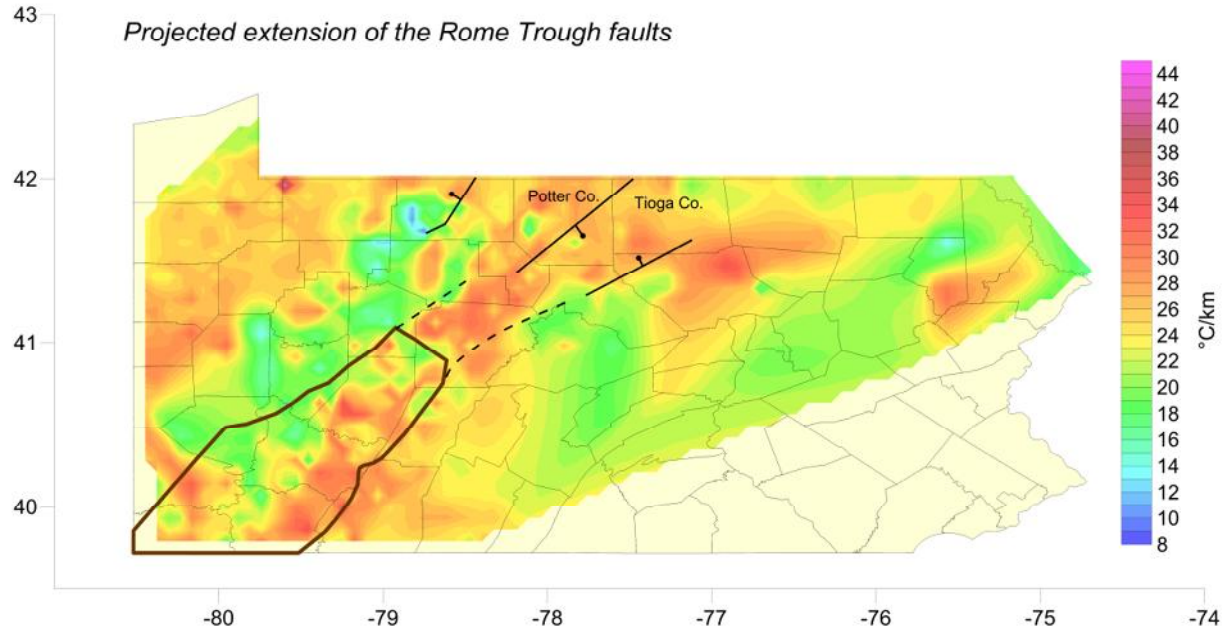

Figure 3.12: Thermal gradient in the Appalachian Basin of Pennsylvania with projected northern extensions of faults associated with the Rome Trough. The dashed lines are interpreted from areas of high gradient; the normal faults in central north Pennsylvania are based on Ryder (1992).

basement intrusions or deep groundwater flow are present due to the faults and sedimentary structure of the Rome Trough, caution should be taken in the evaluation of the low grade geothermal resources as the projected temperatures at depth could be misrepresented.

3.5 References

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CHAPTER 4

CONCLUSIONS AND FUTURE WORK

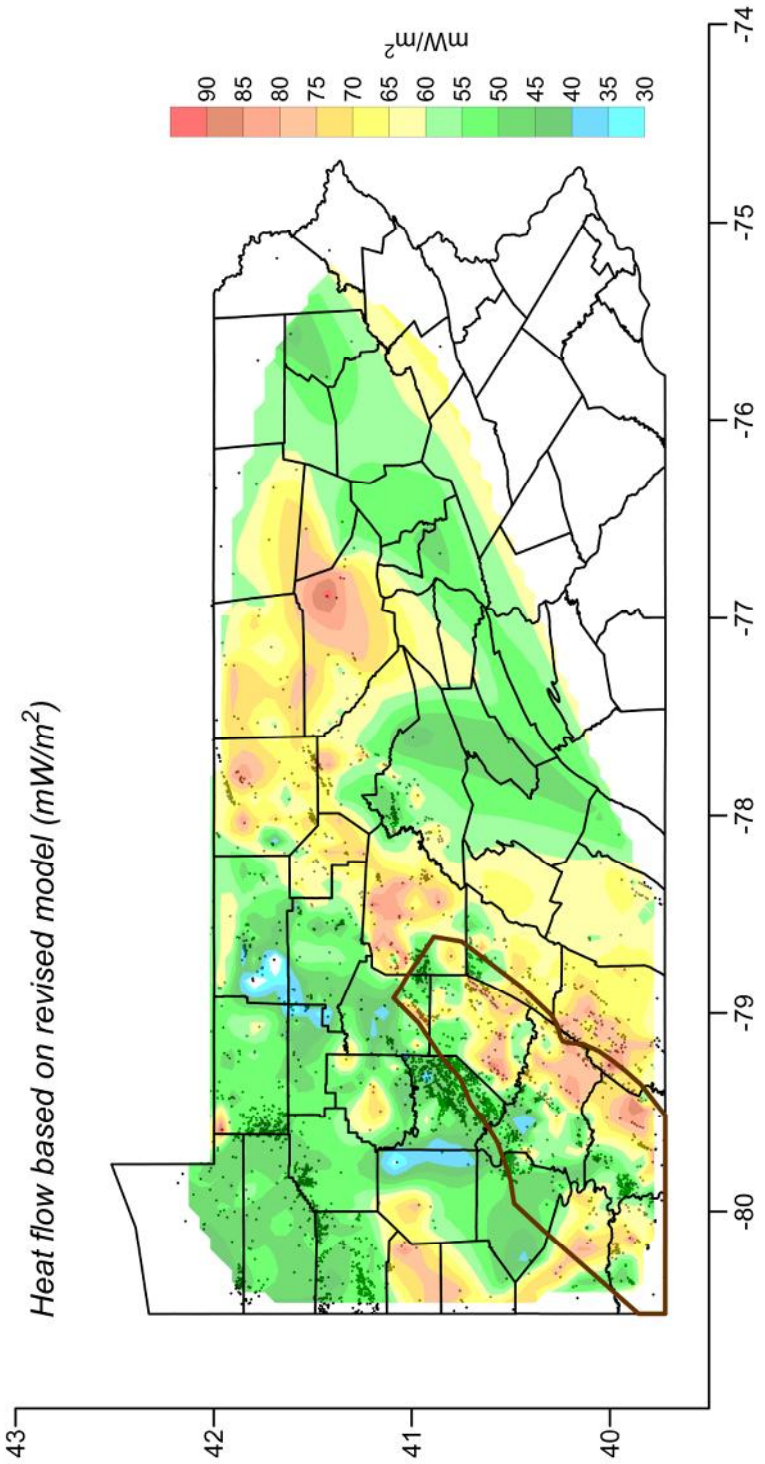
The recent availability of well log data and the development of improved methods for heat flow calculations (Stutz et al., 2012) have enabled an efficient updated assessment of the geothermal resources in the Appalachian Basin of New York and Pennsylvania with high spatial resolution and accuracy. Temperature-at-depth maps indicate that direct-use and combined heat and power (co-generation) applications of these lower grade geothermal resources are widely accessible throughout the area, while suitable temperature gradients for geothermal electricity generation may be possible at select locations with favorable financials to attract investment. Future improvements of the maps and methods presented in this paper include supplementing areas of sparse data, developing a BHT correction specific to the NY and PA region, and obtaining additional equilibrated temperature data for calibration, as well as expanding the boundaries of the current study into the New England states. As a product of achieving the goal of increased spatial resolution of the geothermal resources within the Appalachian Basin of New York and Pennsylvania, a number of isolated "hot spots" have emerged. The next step is to ascertain the credibility of these anomalies to determine their potential for EGS development.

A revised sedimentary model produced from the compilation of the depth to basement map and individual well log elevation measurements was used to re-evaluate the heat flow and produce estimates of temperatures at depth over the Appalachian Basin of Pennsylvania. The resulting average heat flow of the dataset remained at approximately the same value as that calculated using the simplified geologic model, however the spatial distribution of the resource changed noticeably. Maps of estimated temperatures at depth support the conclusion that the geothermal temperatures necessary for thermal direct-use applications are available at depths of 4.5 to 6 km over a majority of the state. Comparison of the bottom hole and projected temperatures for two of the deepest wells in Pennsylvania illustrates the increased accuracy of the revised model.

The location of a major basement fault (or fault zone) and increase in sedimentary thickness along the eastern edge of the Rome Trough corresponds with an area of above-average thermal gradient (30°C/km), heat flow (70 mW/m^2), and projected temperatures at depth (>150°C at 6 km). Because the incorporation of an extra thickness of deep strata does not change the projected temperatures at depth by more than a few degrees Celsius, the preferred interpretation for the temperature anomalies associated with the Rome Trough is that granitic intrusions and/or deep groundwater movement may be responsible. Recommendations for further investigation include gathering of seismic, geochemical, and resistivity data in order to facilitate understanding of basement composition, deep basin fluid flow, thermal conductivities, and the extent of the Rome Trough faults throughout Pennsylvania. The geothermal data presented in this paper for New York State are based on the most recent available geologic surveys and therefore do not require revision; attention should instead be focused on the gathering of additional BHT and thermal conductivity data. This information will help to better define geologic heterogeneities and identify local spatial variations of geothermal resources for EGS development.

APPENDIX A

FIGURE 3.8 ENLARGED



APPENDIX B

WELL DATABASE AND SEDIMENT THICKNESS BASED ON REVISED MODEL

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
31003042480000	-78.1599	42.4705	59	71	2145	29	NY	Allegany	NY28	2404
31003136840000	-77.9848	42.4409	34	33	959	25	NY	Allegany	NY28	2640
31003162020000	-78.1689	42.4276	23	19	750	13	NY	Allegany	NY28	2541
31003162380000	-78.1790	42.4210	36	39	1294	23	NY	Allegany	NY28	2545
31003165570000	-78.0171	42.1720	43	46	1244	30	NY	Allegany	NY28	3309
31007050870000	-75.9475	42.3235	41	53	2180	20	NY	Broome	NY29	3281
31007050870100	-75.9475	42.3235	56	72	2934	22	NY	Broome	NY29	3281
31007229840000	-75.6703	42.1782	71	88	3010	26	NY	Broome	NY29	3658
31007229840100	-75.6703	42.1782	69	87	3000	26	NY	Broome	NY29	3658
31007229950000	-75.8335	42.1374	77	94	3086	28	NY	Broome	NY29	3825
31007229950100	-75.8335	42.1374	58	75	3086	21	NY	Broome	NY29	3825
31007230300000	-76.0442	42.3015	60	76	2730	25	NY	Broome	NY29	3333
31007230320000	-76.0442	42.2438	60	76	2740	24	NY	Broome	NY29	3475
31007230320100	-76.0442	42.2438	60	76	2749	24	NY	Broome	NY29	3475
31007230560000	-75.8249	42.1428	55	73	3080	21	NY	Broome	NY29	3782
31007230560100	-75.8249	42.1428	52	69	3080	20	NY	Broome	NY29	3782
31007230780000	-75.8037	42.1527	41	52	2049	21	NY	Broome	NY29	3708
31007230780200	-75.8037	42.1527	58	75	2898	23	NY	Broome	NY29	3708
31007230830000	-75.7948	42.1346	27	32	1493	16	NY	Broome	NY29	3766
31009053130000	-78.8660	42.4311	36	36	1057	26	NY	Cattaraugus	NY27	1985
31009092350000	-78.5685	42.0087	47	57	1929	25	NY	Cattaraugus	NY27	3245
31009092350000	-78.5685	42.0087	84	103	3553	26	NY	Cattaraugus	NY27	3245
31009162330000	-79.0182	42.1269	43	49	1462	27	NY	Cattaraugus	NY27	2544
31009163410000	-79.0187	42.1038	44	50	1508	27	NY	Cattaraugus	NY27	2619
31009168270000	-79.0342	42.1153	42	47	1464	26	NY	Cattaraugus	NY27	2563
31009169930000	-79.0570	42.1984	33	36	1219	22	NY	Cattaraugus	NY27	2380
31009170670000	-78.8894	42.3303	39	41	1227	26	NY	Cattaraugus	NY27	2242
31009170960000	-78.9854	42.2352	38	41	1275	25	NY	Cattaraugus	NY27	2352
31009170990000	-78.9673	42.2429	34	37	1286	22	NY	Cattaraugus	NY27	2353
31009171790000	-78.9750	42.3958	34	33	1004	24	NY	Cattaraugus	NY27	1935

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
31009172410000	-79.0231	42.3606	32	32	1020	22	NY	Cattaraugus	NY27	2026
31009172540000	-79.0336	42.3567	36	35	1015	26	NY	Cattaraugus	NY27	2034
31009176370000	-78.9837	42.3854	32	32	1030	22	NY	Cattaraugus	NY27	1960
31009179500000	-79.0110	42.1831	34	36	1234	22	NY	Cattaraugus	NY27	2447
31009184350000	-79.0375	42.1105	42	47	1447	26	NY	Cattaraugus	NY27	2572
31009184840000	-78.8283	42.3884	34	35	1074	24	NY	Cattaraugus	NY27	2166
31009185390000	-79.0565	42.1128	40	44	1377	26	NY	Cattaraugus	NY27	2542
31009191020000	-79.0286	42.2514	36	37	1148	24	NY	Cattaraugus	NY27	2289
31009191030000	-78.9842	42.2281	39	42	1305	25	NY	Cattaraugus	NY27	2370
31009191250000	-78.3549	42.1787	37	39	1218	25	NY	Cattaraugus	NY27	3018
31009192110000	-79.0382	42.2199	35	37	1174	24	NY	Cattaraugus	NY27	2363
31009192830000	-78.9981	42.2417	38	41	1259	25	NY	Cattaraugus	NY27	2328
31009197770000	-78.9596	42.2325	40	44	1361	26	NY	Cattaraugus	NY27	2381
31009199560000	-78.9817	42.2467	38	41	1267	25	NY	Cattaraugus	NY27	2331
31009199570000	-79.0128	42.2538	37	34	846	29	NY	Cattaraugus	NY27	2290
31009199850000	-79.0165	42.2367	37	40	1230	25	NY	Cattaraugus	NY27	2334
31009200670000	-79.0515	42.2411	39	40	1145	27	NY	Cattaraugus	NY27	2301
31009218090000	-78.6720	42.3954	31	33	1166	20	NY	Cattaraugus	NY27	2257
31009218090000	-78.6720	42.3954	54	66	2167	26	NY	Cattaraugus	NY27	2257
31009218600000	-78.6041	42.4906	43	43	993	34	NY	Cattaraugus	NY27	2069
31009218690000	-78.5083	42.5003	46	47	1082	35	NY	Cattaraugus	NY27	2172
31009234350000	-78.5114	42.0284	47	54	1593	28	NY	Cattaraugus	NY27	3262
31009234350000	-78.5114	42.0284	67	83	2845	26	NY	Cattaraugus	NY27	3262
31009234560000	-78.5228	42.4976	53	63	2001	27	NY	Cattaraugus	NY27	2153
31009234560100	-78.5228	42.4976	46	56	2005	24	NY	Cattaraugus	NY27	2153
31009240050000	-78.6747	42.4211	24	27	1206	15	NY	Cattaraugus	NY27	2209
31009240260000	-79.0576	42.4986	24	21	782	15	NY	Cattaraugus	NY27	1658
31009240310000	-79.0547	42.4863	24	21	822	15	NY	Cattaraugus	NY27	1678
31009240660000	-79.0289	42.5099	25	21	735	16	NY	Cattaraugus	NY27	1652
31009242840000	-78.9935	42.4890	24	21	800	15	NY	Cattaraugus	NY27	1720
31009254590000	-78.9070	42.2396	57	70	2219	27	NY	Cattaraugus	NY27	2415
31011046240000	-76.4907	43.2526	33	31	931	24	NY	Cayuga	NY29	894
31011050000000	-76.5524	43.1051	32	33	1144	21	NY	Cayuga	NY29	1114
31011050110000	-76.5531	43.1462	27	27	1089	17	NY	Cayuga	NY29	1044
31011111290000	-76.5477	43.1207	29	28	931	20	NY	Cayuga	NY29	1086
31011121490000	-76.2930	42.6415	41	45	1384	26	NY	Cayuga	NY29	2317
31011135990000	-76.6992	42.9085	24	18	646	14	NY	Cayuga	NY29	1512
31011136370000	-76.7052	42.9194	28	22	621	21	NY	Cayuga	NY29	1494
31011136380000	-76.6951	42.9162	27	21	627	19	NY	Cayuga	NY29	1503

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
31011159620000	-76.6676	42.8604	33	26	608	28	NY	Cayuga	NY29	1626
31011161180000	-76.6283	42.7511	37	40	1274	24	NY	Cayuga	NY29	1980
31011161190000	-76.4545	42.6607	34	38	1332	21	NY	Cayuga	NY29	2333
31011161200000	-76.5680	42.7202	22	17	693	12	NY	Cayuga	NY29	2112
31011161200000	-76.5680	42.7202	52	64	2239	25	NY	Cayuga	NY29	2112
31011175080000	-76.5614	43.1291	33	34	1115	23	NY	Cayuga	NY29	1071
31011175080000	-76.5614	43.1291	48	48	1061	37	NY	Cayuga	NY29	1071
31011175100000	-76.5518	43.1384	36	36	1112	25	NY	Cayuga	NY29	1056
31011175580000	-76.5212	43.0112	49	53	1388	32	NY	Cayuga	NY29	1330
31011175590000	-76.6995	42.9244	39	45	1532	23	NY	Cayuga	NY29	1489
31011204370000	-76.6757	42.9094	27	21	609	20	NY	Cayuga	NY29	1526
31011228220000	-76.5499	43.0945	32	33	1094	22	NY	Cayuga	NY29	1134
31011231450000	-76.5616	43.1024	34	35	1124	23	NY	Cayuga	NY29	1118
31011231450100	-76.5616	43.1024	34	33	973	25	NY	Cayuga	NY29	1118
31011231580000	-76.5426	42.7850	52	62	1854	28	NY	Cayuga	NY29	1919
31011232200000	-76.5472	43.1290	21	16	692	10	NY	Cayuga	NY29	1071
31011232200000	-76.5472	43.1290	27	25	894	17	NY	Cayuga	NY29	1071
31011238400000	-76.5060	42.6387	43	53	1934	23	NY	Cayuga	NY29	2392
31011238400100	-76.5060	42.6387	54	64	1925	28	NY	Cayuga	NY29	2392
31011900010000	-76.5443	42.9448	50	57	1603	30	NY	Cayuga	NY29	1506
31013026550000	-79.0876	42.4320	30	29	938	21	NY	Chautauqua	NY27	1759
31013041540000	-79.1316	42.3421	34	35	1100	23	NY	Chautauqua	NY27	1987
31013041540000	-79.1316	42.3421	56	65	1914	29	NY	Chautauqua	NY27	1987
31013044370000	-79.3375	42.1836	67	80	2340	30	NY	Chautauqua	NY27	2152
31013044370000	-79.3375	42.1836	32	35	1263	21	NY	Chautauqua	NY27	2152
31013044600000	-79.2620	42.5212	44	48	1356	29	NY	Chautauqua	NY27	874
31013045350000	-79.2630	42.5115	36	38	1136	25	NY	Chautauqua	NY27	1096
31013045610000	-79.4140	42.2400	36	37	1128	25	NY	Chautauqua	NY27	2036
31013076490000	-79.1663	42.4072	33	32	1006	23	NY	Chautauqua	NY27	1778
31013093550000	-79.4069	42.4372	38	43	1456	24	NY	Chautauqua	NY27	1145
31013099390000	-79.3785	42.4158	40	46	1524	24	NY	Chautauqua	NY27	1744
31013099610000	-79.4457	42.3758	25	20	721	16	NY	Chautauqua	NY27	1806
31013113870000	-79.6633	42.2191	47	57	1884	25	NY	Chautauqua	NY27	1973
31013141580000	-79.6226	42.3117	27	22	735	18	NY	Chautauqua	NY27	1504
31013153600000	-79.3571	42.2040	35	37	1186	23	NY	Chautauqua	NY27	2137
31013157570000	-79.4053	42.2345	38	40	1160	27	NY	Chautauqua	NY27	2057
31013157580000	-79.4007	42.2305	29	30	1103	19	NY	Chautauqua	NY27	2070
31013158540000	-79.6509	42.0055	37	41	1364	23	NY	Chautauqua	NY27	2369
31013159560000	-79.1919	42.1523	37	40	1234	25	NY	Chautauqua	NY27	2297

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31013160510000	-79.2495	42.2301	34	37	1211	23	NY	Chautauqua	NY27	2096
31013160530000	-79.5997	42.1680	39	41	1179	27	NY	Chautauqua	NY27	2056
31013160550000	-79.3016	42.2186	34	35	1165	23	NY	Chautauqua	NY27	2138
31013160600000	-79.2399	42.2274	34	36	1244	22	NY	Chautauqua	NY27	2091
31013160640000	-79.2418	42.2331	35	38	1231	23	NY	Chautauqua	NY27	2085
31013160650000	-79.2492	42.2417	35	37	1183	24	NY	Chautauqua	NY27	2081
31013162310000	-79.4330	42.0638	31	29	955	21	NY	Chautauqua	NY27	2278
31013163840000	-79.6207	42.1496	40	42	1189	28	NY	Chautauqua	NY27	2084
31013167080000	-79.2612	42.2198	33	35	1144	22	NY	Chautauqua	NY27	2120
31013169100000	-79.2564	42.2253	35	31	792	28	NY	Chautauqua	NY27	2109
31013170630000	-79.0928	42.0140	36	43	1612	21	NY	Chautauqua	NY27	2778
31013177010000	-79.7254	42.0306	42	45	1268	28	NY	Chautauqua	NY27	2319
31013178420000	-79.5274	42.0570	38	42	1346	25	NY	Chautauqua	NY27	2265
31013178680000	-79.5493	42.0846	34	32	935	25	NY	Chautauqua	NY27	2193
31013178760000	-79.6760	42.0522	38	42	1311	25	NY	Chautauqua	NY27	2290
31013179460000	-79.7123	42.0665	41	42	1183	28	NY	Chautauqua	NY27	2268
31013180020000	-79.0927	42.1211	34	37	1288	22	NY	Chautauqua	NY27	2487
31013184480000	-79.1543	42.0795	40	44	1309	26	NY	Chautauqua	NY27	2568
31013184490000	-79.3452	42.1930	35	38	1258	23	NY	Chautauqua	NY27	2148
31013185370000	-79.2422	42.1915	36	37	1193	24	NY	Chautauqua	NY27	2141
31013185440000	-79.2492	42.2344	32	31	991	22	NY	Chautauqua	NY27	2091
31013185870000	-79.2399	42.1957	30	32	1228	19	NY	Chautauqua	NY27	2135
31013187150000	-79.2534	42.2563	35	36	1135	24	NY	Chautauqua	NY27	2058
31013187250000	-79.5638	42.0676	35	39	1326	22	NY	Chautauqua	NY27	2232
31013187370000	-79.1333	42.4008	30	26	747	22	NY	Chautauqua	NY27	1815
31013187400000	-79.1737	42.2744	30	32	1166	19	NY	Chautauqua	NY27	2057
31013188020000	-79.1097	42.3657	35	35	1022	25	NY	Chautauqua	NY27	1939
31013188040000	-79.0987	42.3548	35	35	1037	25	NY	Chautauqua	NY27	1984
31013188050000	-79.0931	42.3583	36	36	1018	26	NY	Chautauqua	NY27	1980
31013188060000	-79.1035	42.3515	35	35	1072	24	NY	Chautauqua	NY27	1989
31013188730000	-79.0858	42.3896	34	33	988	24	NY	Chautauqua	NY27	1897
31013188740000	-79.0659	42.3846	34	34	1038	24	NY	Chautauqua	NY27	1934
31013188750000	-79.0958	42.4114	30	26	768	22	NY	Chautauqua	NY27	1816
31013188760000	-79.0785	42.3962	32	31	988	23	NY	Chautauqua	NY27	1884
31013188770000	-79.0733	42.4093	35	35	1051	25	NY	Chautauqua	NY27	1849
31013188780000	-79.0698	42.3884	34	33	966	24	NY	Chautauqua	NY27	1918
31013188790000	-79.0633	42.3898	35	35	1072	24	NY	Chautauqua	NY27	1921
31013188860000	-79.0713	42.3795	34	33	997	24	NY	Chautauqua	NY27	1943
31013188870000	-79.0822	42.4048	34	33	980	24	NY	Chautauqua	NY27	1853

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31013188880000	-79.0633	42.3771	35	35	1038	25	NY	Chautauqua	NY27	1958
31013188890000	-79.1288	42.4079	33	34	1072	23	NY	Chautauqua	NY27	1796
31013188900000	-79.1177	42.4027	35	36	1089	24	NY	Chautauqua	NY27	1821
31013189110000	-79.0676	42.3722	34	33	999	24	NY	Chautauqua	NY27	1968
31013189150000	-79.1287	42.3791	35	35	1044	25	NY	Chautauqua	NY27	1883
31013189160000	-79.0705	42.4022	34	34	1045	24	NY	Chautauqua	NY27	1875
31013189290000	-79.1115	42.3999	34	35	1093	24	NY	Chautauqua	NY27	1836
31013189300000	-79.2714	42.2012	30	31	1125	20	NY	Chautauqua	NY27	2151
31013189460000	-79.0646	42.4052	35	35	1094	24	NY	Chautauqua	NY27	1871
31013189480000	-79.1229	42.3756	34	34	1000	25	NY	Chautauqua	NY27	1898
31013189500000	-79.0931	42.3986	35	34	968	26	NY	Chautauqua	NY27	1860
31013189510000	-79.1464	42.4023	34	34	1028	24	NY	Chautauqua	NY27	1802
31013189590000	-79.1556	42.3891	34	35	1074	24	NY	Chautauqua	NY27	1835
31013189800000	-79.1028	42.3620	36	35	1017	26	NY	Chautauqua	NY27	1958
31013189830000	-79.0722	42.3846	35	34	995	25	NY	Chautauqua	NY27	1927
31013189840000	-79.0881	42.3950	35	34	984	25	NY	Chautauqua	NY27	1877
31013189870000	-79.5688	42.0729	33	36	1284	21	NY	Chautauqua	NY27	2219
31013190410000	-79.0648	42.4000	35	35	1084	24	NY	Chautauqua	NY27	1888
31013190430000	-79.0647	42.3945	35	35	1066	25	NY	Chautauqua	NY27	1905
31013190470000	-79.0809	42.4099	35	34	977	26	NY	Chautauqua	NY27	1838
31013190480000	-79.0715	42.3943	35	35	1018	25	NY	Chautauqua	NY27	1898
31013190650000	-79.0974	42.3861	37	37	1046	26	NY	Chautauqua	NY27	1894
31013190660000	-79.1898	42.3037	34	34	1039	24	NY	Chautauqua	NY27	1990
31013191350000	-79.7524	42.0255	37	40	1253	25	NY	Chautauqua	NY27	2319
31013191650000	-79.2122	42.2187	38	42	1291	25	NY	Chautauqua	NY27	2096
31013192520000	-79.2495	42.2446	33	32	949	24	NY	Chautauqua	NY27	2077
31013193030000	-79.7548	42.0628	38	41	1291	25	NY	Chautauqua	NY27	2260
31013193480000	-79.2599	42.2312	31	29	946	21	NY	Chautauqua	NY27	2104
31013197600000	-79.2422	42.2110	36	38	1195	24	NY	Chautauqua	NY27	2116
31013199090000	-79.2681	42.2198	29	27	901	21	NY	Chautauqua	NY27	2125
31013199240000	-79.4091	42.1542	28	30	1156	18	NY	Chautauqua	NY27	2112
31013199490000	-79.2631	42.1952	35	36	1134	24	NY	Chautauqua	NY27	2151
31013200480000	-79.2668	42.2157	34	35	1121	24	NY	Chautauqua	NY27	2129
31013201210000	-79.2987	42.1984	31	30	968	22	NY	Chautauqua	NY27	2162
31013201220000	-79.3081	42.2042	29	26	856	20	NY	Chautauqua	NY27	2155
31013201270000	-79.2188	42.2487	26	24	910	16	NY	Chautauqua	NY27	2050
31013201730000	-79.2031	42.2643	33	34	1075	23	NY	Chautauqua	NY27	2034
31013202100000	-79.5894	42.1095	37	39	1222	25	NY	Chautauqua	NY27	2150
31013202950000	-79.4286	42.1602	34	36	1173	23	NY	Chautauqua	NY27	2098

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31013204080000	-79.2633	42.2095	26	26	1114	16	NY	Chautauqua	NY27	2135
31013208260000	-79.3628	41.9997	39	44	1433	25	NY	Chautauqua	NY27	2501
31013223750000	-79.3150	42.2579	39	39	1053	28	NY	Chautauqua	NY27	2073
31013224980000	-79.4171	42.1438	52	65	2313	24	NY	Chautauqua	NY27	2128
31013225310000	-79.3919	42.1979	56	68	2233	26	NY	Chautauqua	NY27	2114
31013225880000	-79.3902	42.2299	54	67	2170	27	NY	Chautauqua	NY27	2087
31013225960000	-79.5316	42.3383	43	52	1794	24	NY	Chautauqua	NY27	784
31013240800000	-79.5376	42.2923	46	45	990	37	NY	Chautauqua	NY27	1857
31013240820000	-79.0935	42.5091	23	19	741	13	NY	Chautauqua	NY27	1660
31013243360000	-79.1141	42.4708	25	23	869	16	NY	Chautauqua	NY27	1638
31013243380000	-79.0931	42.4774	32	30	887	23	NY	Chautauqua	NY27	1666
31013243480000	-79.1078	42.4869	23	20	806	14	NY	Chautauqua	NY27	1645
31013243540000	-79.1223	42.5110	23	18	716	13	NY	Chautauqua	NY27	1598
31013243550000	-79.1297	42.5071	23	19	717	14	NY	Chautauqua	NY27	1592
31013243830000	-79.0925	42.4949	29	25	776	21	NY	Chautauqua	NY27	1675
31015004430000	-76.5377	42.1986	119	137	3347	38	NY	Chemung	NY28	3767
31015103350000	-76.6587	42.1691	74	92	3235	26	NY	Chemung	NY28	3928
31015173180000	-76.7723	42.0829	35	33	906	26	NY	Chemung	NY28	4192
31015228260000	-76.7738	42.2728	66	83	2852	26	NY	Chemung	NY28	3587
31015228270000	-76.7747	42.2841	67	84	2876	26	NY	Chemung	NY28	3557
31015228270000	-76.7747	42.2841	37	38	1077	27	NY	Chemung	NY28	3557
31015228310000	-76.9582	42.1868	52	62	1982	27	NY	Chemung	NY28	3705
31015228380000	-76.6513	42.1754	73	90	3053	27	NY	Chemung	NY28	3893
31015228390000	-76.9161	42.2853	35	37	1177	24	NY	Chemung	NY28	3467
31015228390000	-76.9161	42.2853	68	84	2857	26	NY	Chemung	NY28	3467
31015228530000	-76.9209	42.1953	69	86	2951	26	NY	Chemung	NY28	3720
31015228570000	-76.7913	42.2727	38	38	1086	27	NY	Chemung	NY28	3587
31015228570000	-76.7913	42.2727	76	92	2794	30	NY	Chemung	NY28	3587
31015228620000	-76.8132	42.2683	71	87	2844	27	NY	Chemung	NY28	3586
31015228800000	-76.8138	42.2790	66	82	2776	26	NY	Chemung	NY28	3562
31015228800100	-76.8139	42.2790	66	81	2733	27	NY	Chemung	NY28	3562
31015228890000	-76.7938	42.2832	68	85	2900	26	NY	Chemung	NY28	3561
31015228890100	-76.7938	42.2832	66	82	2764	26	NY	Chemung	NY28	3561
31015228900000	-76.8920	42.2865	68	85	2861	27	NY	Chemung	NY28	3482
31015228900000	-76.8920	42.2865	73	88	2663	30	NY	Chemung	NY28	3482
31015228910000	-76.9385	42.2380	73	91	3146	26	NY	Chemung	NY28	3549
31015228990000	-76.6868	42.1604	74	92	3209	26	NY	Chemung	NY28	3956
31015228990100	-76.6868	42.1604	73	90	3112	26	NY	Chemung	NY28	3956
31015229010000	-76.9567	42.2714	74	91	2892	28	NY	Chemung	NY28	3466

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31015229020000	-76.8691	42.2526	69	86	2927	26	NY	Chemung	NY28	3588
31015229020100	-76.8691	42.2526	69	86	2950	26	NY	Chemung	NY28	3588
31015229100000	-76.8584	42.2786	74	90	2832	29	NY	Chemung	NY28	3525
31015229110000	-76.6927	42.1471	83	101	3160	29	NY	Chemung	NY28	4022
31015229180000	-76.8844	42.2073	70	87	2866	27	NY	Chemung	NY28	3721
31015229180100	-76.8844	42.2073	70	87	2971	26	NY	Chemung	NY28	3721
31015229190000	-76.9201	42.2374	66	83	3005	25	NY	Chemung	NY28	3572
31015229190100	-76.9201	42.2374	84	102	3075	30	NY	Chemung	NY28	3572
31015229240000	-76.7509	42.2690	70	87	2988	26	NY	Chemung	NY28	3587
31015229240100	-76.7509	42.2690	67	84	2873	26	NY	Chemung	NY28	3587
31015229330000	-76.6622	42.1587	86	103	3151	30	NY	Chemung	NY28	3977
31015229600000	-76.9065	42.2446	71	88	2992	26	NY	Chemung	NY28	3571
31015229750000	-76.8899	42.2386	78	95	2929	29	NY	Chemung	NY28	3609
31015229790000	-76.7239	42.1986	74	91	2970	28	NY	Chemung	NY28	3770
31015230170000	-76.8588	42.2719	41	49	1802	22	NY	Chemung	NY28	3542
31015230170000	-76.8588	42.2719	60	75	2655	25	NY	Chemung	NY28	3542
31015230230000	-76.6118	42.1698	44	55	1984	23	NY	Chemung	NY28	3906
31015230230000	-76.6118	42.1698	85	102	3042	31	NY	Chemung	NY28	3906
31015230230000	-76.6118	42.1698	67	84	2922	25	NY	Chemung	NY28	3906
31015230280000	-76.9098	42.1892	41	51	1881	22	NY	Chemung	NY28	3770
31015230280000	-76.9098	42.1892	60	76	2811	24	NY	Chemung	NY28	3770
31015230760000	-76.9207	42.0245	82	101	3453	27	NY	Chemung	NY28	4245
31015230760000	-76.9207	42.0245	64	78	2397	29	NY	Chemung	NY28	4245
31015230970000	-76.9268	42.0547	85	103	3352	28	NY	Chemung	NY28	4178
31015231040000	-76.7150	42.1360	76	93	3111	27	NY	Chemung	NY28	4069
31015231140000	-76.9637	42.0526	71	90	3578	23	NY	Chemung	NY28	4180
31015231140000	-76.9637	42.0526	57	71	2434	25	NY	Chemung	NY28	4180
31015231340000	-76.8826	42.1928	42	52	1943	22	NY	Chemung	NY28	3787
31015231460000	-76.5739	42.1603	50	62	2156	25	NY	Chemung	NY28	3936
31015231460000	-76.5739	42.1603	73	91	3020	27	NY	Chemung	NY28	3936
31015231560100	-76.6767	42.1658	76	93	3069	27	NY	Chemung	NY28	3933
31015231730000	-76.7737	42.0944	79	96	3107	28	NY	Chemung	NY28	4182
31015231730000	-76.7737	42.0944	85	103	3229	29	NY	Chemung	NY28	4182
31015231820000	-76.9438	42.1565	77	93	2776	30	NY	Chemung	NY28	3881
31015231820000	-76.9438	42.1565	42	53	1993	22	NY	Chemung	NY28	3881
31015231820100	-76.9438	42.1565	73	90	2943	27	NY	Chemung	NY28	3881
31015231860100	-76.9013	42.0523	92	111	3524	29	NY	Chemung	NY28	4186
31015231860100	-76.9013	42.0523	52	66	2325	24	NY	Chemung	NY28	4186
31015232000000	-76.8928	42.2036	43	48	1409	28	NY	Chemung	NY28	3727

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
31015232000000	-76.8928	42.2036	79	95	2686	32	NY	Chemung	NY28	3727
31015232030000	-76.5921	42.1920	78	94	2763	31	NY	Chemung	NY28	3791
31015232120000	-76.9364	42.0674	85	103	3390	28	NY	Chemung	NY28	4153
31015232120000	-76.9364	42.0674	57	70	2361	26	NY	Chemung	NY28	4153
31015232280000	-76.7668	42.2180	43	50	1629	25	NY	Chemung	NY28	3711
31015232280000	-76.7668	42.2180	73	89	2654	30	NY	Chemung	NY28	3711
31015238140000	-76.5626	42.1855	68	84	2636	28	NY	Chemung	NY28	3821
31015238190000	-76.9472	42.0548	53	66	2202	26	NY	Chemung	NY28	4176
31015238190000	-76.9472	42.0548	82	101	3520	26	NY	Chemung	NY28	4176
31015238190300	-76.9472	42.0548	87	106	3455	28	NY	Chemung	NY28	4176
31015238200000	-76.8928	42.2036	82	98	2867	31	NY	Chemung	NY28	3727
31015238200000	-76.8928	42.2036	48	57	1893	26	NY	Chemung	NY28	3727
31015238270000	-76.7520	42.2209	48	57	1811	26	NY	Chemung	NY28	3701
31015238270000	-76.7520	42.2209	62	77	2623	26	NY	Chemung	NY28	3701
31015238430000	-76.9368	42.0099	48	61	2285	23	NY	Chemung	NY28	4283
31015238430000	-76.9368	42.0099	85	104	3634	26	NY	Chemung	NY28	4283
31015239120000	-76.9116	42.0050	48	60	2210	23	NY	Chemung	NY28	4290
31015239120000	-76.9116	42.0050	84	103	3419	27	NY	Chemung	NY28	4290
31015239470000	-76.9505	42.0763	47	59	2076	24	NY	Chemung	NY28	4131
31015239470000	-76.9505	42.0763	76	94	3355	25	NY	Chemung	NY28	4131
31015239500000	-76.7849	42.2395	53	62	1880	28	NY	Chemung	NY28	3658
31015239500000	-76.7849	42.2395	69	86	2810	27	NY	Chemung	NY28	3658
31015239700100	-76.9363	42.0662	82	101	3507	26	NY	Chemung	NY28	4155
31015260200000	-76.6852	42.1417	32	35	1279	21	NY	Chemung	NY28	4048
31015260740000	-76.7362	42.1223	42	53	1964	22	NY	Chemung	NY28	4120
31015260920000	-76.7313	42.2045	78	95	2941	29	NY	Chemung	NY28	3749
31015260940000	-76.5465	42.2523	71	87	2902	27	NY	Chemung	NY28	3594
31015261230000	-76.7261	42.1031	82	100	3184	28	NY	Chemung	NY28	4161
31015261420000	-76.5953	42.2444	72	89	2928	27	NY	Chemung	NY28	3610
31015261960000	-76.8219	42.1816	39	37	899	31	NY	Chemung	NY28	3867
31015261960000	-76.8219	42.1816	72	89	2835	28	NY	Chemung	NY28	3867
31015261960000	-76.8219	42.1816	58	75	2835	23	NY	Chemung	NY28	3867
31017011600000	-75.3447	42.6934	42	50	1718	24	NY	Chenango	NY29	1750
31017106070000	-75.4847	42.4511	33	40	1611	19	NY	Chenango	NY29	2780
31017106090000	-75.5883	42.3476	51	61	1904	27	NY	Chenango	NY29	3251
31017231630000	-75.6319	42.6403	48	51	1275	33	NY	Chenango	NY29	2012
31023047140000	-76.0006	42.5186	51	62	2121	25	NY	Cortland	NY29	2749
31023047140000	-76.0006	42.5186	57	72	2521	25	NY	Cortland	NY29	2749
31023194840000	-76.2659	42.7029	46	54	1703	26	NY	Cortland	NY29	2133

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31023195400000	-76.0206	42.5544	45	53	1770	25	NY	Cortland	NY29	2578
31023195400000	-76.0206	42.5544	57	70	2375	26	NY	Cortland	NY29	2578
31023195400000	-76.0206	42.5544	31	29	954	21	NY	Cortland	NY29	2578
31023215000000	-75.9133	42.6391	33	34	1148	22	NY	Cortland	NY29	2288
31023215000000	-75.9133	42.6391	46	58	2099	23	NY	Cortland	NY29	2288
31023227980000	-76.0416	42.6073	54	66	2210	26	NY	Cortland	NY29	2368
31023227980100	-76.0416	42.6073	61	73	2154	29	NY	Cortland	NY29	2368
31023228050000	-76.1086	42.5829	61	74	2214	29	NY	Cortland	NY29	2515
31023228050100	-76.1086	42.5829	60	73	2224	29	NY	Cortland	NY29	2515
31023228180000	-76.2138	42.5391	28	25	828	19	NY	Cortland	NY29	2737
31023230350000	-76.2461	42.4946	51	65	2384	23	NY	Cortland	NY29	2912
31023230350100	-76.2461	42.4946	52	65	2392	24	NY	Cortland	NY29	2912
31023230350200	-76.2461	42.4946	44	57	2246	21	NY	Cortland	NY29	2912
31023230510000	-75.9245	42.5791	21	16	681	10	NY	Cortland	NY29	2494
31023231760000	-76.1826	42.6991	50	61	2016	26	NY	Cortland	NY29	2138
31023231760100	-76.1826	42.6991	54	66	2106	27	NY	Cortland	NY29	2138
31025040730000	-75.0422	42.3740	27	30	1288	16	NY	Delaware	NY30	2322
31025042140000	-74.9214	42.1828	55	73	3345	19	NY	Delaware	NY30	2311
31025043790000	-74.6273	42.2735	51	67	2754	21	NY	Delaware	NY30	2171
31025044550000	-75.0442	42.3905	62	76	2417	28	NY	Delaware	NY30	2233
31025102270000	-74.6246	42.2977	46	57	2054	23	NY	Delaware	NY30	2085
31025210050000	-75.0523	42.3991	42	50	1690	24	NY	Delaware	NY30	2240
31029046450000	-78.8681	42.6052	32	28	770	25	NY	Erie	NY27	1615
31029046650000	-78.8502	42.6050	30	26	766	22	NY	Erie	NY27	1631
31029066680000	-78.8442	42.8033	40	43	1314	26	NY	Erie	NY27	540
31029110020000	-78.5354	42.5575	54	64	1909	29	NY	Erie	NY27	1992
31029111140000	-78.9841	42.5981	39	44	1467	24	NY	Erie	NY27	1637
31029117300000	-78.5171	42.7139	43	50	1689	25	NY	Erie	NY27	1741
31029119770000	-78.7412	42.5448	32	31	920	23	NY	Erie	NY27	1854
31029127450000	-78.7201	42.5792	42	40	907	34	NY	Erie	NY27	1800
31029127450000	-78.7201	42.5792	44	51	1681	25	NY	Erie	NY27	1800
31029127450000	-78.7201	42.5792	28	25	771	20	NY	Erie	NY27	1800
31029129100000	-78.8033	42.4665	29	27	834	21	NY	Erie	NY27	1953
31029129100000	-78.8033	42.4665	49	57	1776	27	NY	Erie	NY27	1953
31029182700000	-78.6675	42.6017	32	31	972	22	NY	Erie	NY27	1778
31029187420000	-78.6753	42.5327	31	29	957	21	NY	Erie	NY27	1923
31029188990000	-78.8889	42.6216	24	20	725	15	NY	Erie	NY27	1570
31029192230000	-78.5536	42.5703	33	33	1039	23	NY	Erie	NY27	1946
31029235990000	-78.5901	42.5367	54	63	1821	30	NY	Erie	NY27	1970

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31037045930000	-78.0771	43.0429	33	36	1216	22	NY	Genesee	NY27	1196
31037048060000	-78.0913	43.1155	34	34	1039	24	NY	Genesee	NY27	1089
31037095240000	-78.2440	42.9001	32	35	1246	21	NY	Genesee	NY27	1441
31037107760000	-78.1671	42.9205	39	42	1321	25	NY	Genesee	NY27	1416
31037136720000	-77.9516	42.9936	41	44	1279	27	NY	Genesee	NY27	1251
31037206870000	-78.2370	43.0521	39	43	1407	24	NY	Genesee	NY27	1161
31037206870000	-78.2370	43.0521	35	37	1227	23	NY	Genesee	NY27	1161
31037206870000	-78.2370	43.0521	39	43	1408	24	NY	Genesee	NY27	1161
31039039040000	-74.2303	42.3336	29	35	1464	18	NY	Greene	NY31	2273
31051040690000	-77.9319	42.8716	41	45	1385	26	NY	Livingston	NY28	1437
31051045520000	-77.9367	42.8354	23	17	626	13	NY	Livingston	NY28	1517
31051137000000	-77.8917	42.6973	31	27	792	23	NY	Livingston	NY28	1849
31051137000000	-77.8917	42.6973	48	58	1943	25	NY	Livingston	NY28	1849
31051230030000	-77.8815	42.8862	33	39	1519	19	NY	Livingston	NY28	1457
31053039700000	-75.6501	42.8049	29	29	1017	19	NY	Madison	NY29	1636
31053040330000	-75.3623	42.8637	21	16	717	10	NY	Madison	NY29	1364
31053040450000	-75.6594	42.8263	27	26	962	18	NY	Madison	NY29	1596
31053040490000	-75.6482	42.8293	25	23	871	16	NY	Madison	NY29	1595
31053045560000	-75.3354	42.8667	22	17	675	12	NY	Madison	NY29	1358
31053095780000	-75.8075	42.9512	44	50	1490	27	NY	Madison	NY29	1354
31053095780000	-75.8075	42.9512	32	29	792	25	NY	Madison	NY29	1354
31053194850000	-75.4185	42.8088	44	50	1548	27	NY	Madison	NY29	1561
31053204110000	-75.7291	42.8575	41	47	1597	24	NY	Madison	NY29	1547
31053216990000	-75.5963	42.8100	41	46	1439	26	NY	Madison	NY29	1636
31053217000000	-75.6036	42.8268	26	24	948	16	NY	Madison	NY29	1602
31053228170000	-75.5999	42.7953	47	46	947	39	NY	Madison	NY29	1668
31053230910000	-75.6424	43.0283	27	28	1120	17	NY	Madison	NY29	1102
31055045020000	-77.9649	43.3311	26	20	666	17	NY	Monroe	NY28	422
31055047240000	-77.9749	43.1510	25	24	998	15	NY	Monroe	NY28	1045
31055109210000	-77.9526	43.3334	21	16	670	10	NY	Monroe	NY28	397
31063047190000	-78.5126	43.3360	33	28	656	29	NY	Niagara	NY27	327
31063066670000	-78.4648	43.2076	31	28	817	23	NY	Niagara	NY27	877
31063066690000	-79.0065	43.0800	27	26	934	18	NY	Niagara	NY27	833
31065039280000	-75.4262	42.8680	38	42	1331	25	NY	Oneida	NY29	1436
31067023980000	-76.3236	43.1463	29	26	794	21	NY	Onondaga	NY29	990
31067121630000	-76.3455	42.9370	37	40	1273	24	NY	Onondaga	NY29	1485
31067155840000	-76.4711	43.1549	32	32	1077	22	NY	Onondaga	NY29	1008
31067213350000	-76.3526	43.0661	28	30	1233	17	NY	Onondaga	NY29	1137
31067213360000	-76.4005	43.1228	26	27	1133	16	NY	Onondaga	NY29	1037

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31067228090000	-76.4666	43.1652	28	27	913	19	NY	Onondaga	NY29	992
31067229650000	-76.3418	42.8995	47	54	1612	28	NY	Onondaga	NY29	1598
31067229650100	-76.3418	42.8995	47	54	1608	28	NY	Onondaga	NY29	1598
31067229710000	-76.3469	42.9204	47	53	1566	28	NY	Onondaga	NY29	1539
31067229710100	-76.3469	42.9204	50	57	1637	29	NY	Onondaga	NY29	1539
31067231660000	-76.1737	42.7934	50	61	2037	26	NY	Onondaga	NY29	1894
31069038780000	-77.4406	42.7853	24	22	916	14	NY	Ontario	NY28	1736
31069039470000	-77.4838	42.7880	28	25	788	20	NY	Ontario	NY28	1735
31069039710000	-77.4923	42.7851	22	18	764	11	NY	Ontario	NY28	1754
31069040230000	-77.4849	42.7988	29	26	807	21	NY	Ontario	NY28	1704
31069040360000	-77.4948	42.8094	27	23	751	18	NY	Ontario	NY28	1684
31069040410000	-77.4332	42.7880	33	32	955	24	NY	Ontario	NY28	1734
31069047600000	-77.2795	42.9895	39	43	1312	26	NY	Ontario	NY28	1334
31069048710000	-77.3351	43.0216	34	37	1326	21	NY	Ontario	NY28	1290
31069049470000	-77.3675	42.8393	27	23	813	18	NY	Ontario	NY28	1648
31069229430000	-77.1914	42.8889	32	38	1513	19	NY	Ontario	NY28	1519
31069229430000	-77.1914	42.8889	32	37	1513	19	NY	Ontario	NY28	1519
31069229850000	-77.2133	42.7909	46	54	1765	25	NY	Ontario	NY28	1765
31069229850100	-77.2133	42.7909	45	52	1609	27	NY	Ontario	NY28	1765
31069229850200	-77.2133	42.7909	42	49	1612	25	NY	Ontario	NY28	1765
31071130290000	-74.5653	41.4252	24	18	608	14	NY	Orange	NY31	3314
31071130290000	-74.5653	41.4252	62	79	3015	23	NY	Orange	NY31	3314
31073046110000	-78.2580	43.1910	26	25	927	17	NY	Orleans	NY27	957
31073047300000	-78.1524	43.1803	31	29	965	21	NY	Orleans	NY27	975
31073050860000	-78.0337	43.3081	26	21	745	17	NY	Orleans	NY27	649
31073095400000	-78.0373	43.1886	26	23	873	16	NY	Orleans	NY27	976
31075042080000	-76.1029	43.3263	22	17	683	12	NY	Oswego	NY29	763
31075042090000	-76.3473	43.3188	31	27	789	23	NY	Oswego	NY29	812
31075156130000	-76.0890	43.3514	26	20	680	17	NY	Oswego	NY29	741
31075230700000	-76.2737	43.3649	23	19	747	14	NY	Oswego	NY29	769
31075230710000	-76.2977	43.2940	31	27	819	23	NY	Oswego	NY29	821
31077040550000	-74.7078	42.6310	39	46	1677	22	NY	Otsego	NY30	547
31077101380000	-75.0946	42.6935	29	26	830	20	NY	Otsego	NY30	1464
31077107250000	-75.2464	42.5301	37	39	1212	25	NY	Otsego	NY30	2136
31077108340000	-75.0477	42.5804	46	55	1775	26	NY	Otsego	NY30	1390
31077108380000	-75.3742	42.3292	39	48	1777	22	NY	Otsego	NY30	3244
31077108380000	-75.3742	42.3292	35	44	1779	19	NY	Otsego	NY30	3244
31095102630000	-74.6195	42.4425	37	41	1305	24	NY	Schoharie	NY30	1204
31097002690000	-77.0123	42.4745	27	21	618	19	NY	Schuyler	NY28	2672

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31097003000000	-77.0361	42.4735	29	23	635	23	NY	Schuyler	NY28	2614
31097004480000	-77.0132	42.4654	29	23	604	23	NY	Schuyler	NY28	2690
31097004490000	-77.0413	42.4714	28	22	606	22	NY	Schuyler	NY28	2615
31097004500000	-77.0412	42.4696	23	17	612	13	NY	Schuyler	NY28	2620
31097005380000	-76.9993	42.4685	25	20	673	16	NY	Schuyler	NY28	2731
31097005400000	-76.9993	42.4735	30	24	656	23	NY	Schuyler	NY28	2721
31097005590000	-77.0333	42.4691	29	23	638	23	NY	Schuyler	NY28	2629
31097005620000	-77.0120	42.4768	28	22	629	21	NY	Schuyler	NY28	2669
31097005720000	-77.0264	42.4721	23	17	638	13	NY	Schuyler	NY28	2636
31097006380000	-77.0743	42.4551	30	25	643	24	NY	Schuyler	NY28	2691
31097006430000	-77.0257	42.4698	30	24	637	24	NY	Schuyler	NY28	2644
31097010740000	-77.0177	42.4741	28	22	612	21	NY	Schuyler	NY28	2656
31097010760000	-77.0283	42.4651	30	24	653	24	NY	Schuyler	NY28	2651
31097010800000	-77.0045	42.4772	30	24	658	23	NY	Schuyler	NY28	2695
31097010830000	-77.0313	42.4754	30	24	644	24	NY	Schuyler	NY28	2617
31097010840000	-77.0387	42.4726	29	23	623	22	NY	Schuyler	NY28	2614
31097010850000	-77.0394	42.4779	30	24	641	24	NY	Schuyler	NY28	2600
31097010860000	-77.0387	42.4672	29	23	633	22	NY	Schuyler	NY28	2629
31097010870000	-77.0171	42.4839	36	31	639	34	NY	Schuyler	NY28	2638
31097010890000	-77.0072	42.4684	30	24	668	23	NY	Schuyler	NY28	2703
31097010950000	-77.0867	42.4821	29	22	600	22	NY	Schuyler	NY28	2641
31097011960000	-77.0194	42.4715	30	24	603	25	NY	Schuyler	NY28	2656
31097018110000	-77.0183	42.4698	28	22	604	22	NY	Schuyler	NY28	2664
31097018120000	-77.0333	42.4723	28	22	631	21	NY	Schuyler	NY28	2620
31097026440000	-77.0073	42.4742	29	24	654	22	NY	Schuyler	NY28	2690
31097026450000	-77.0101	42.4762	28	22	639	20	NY	Schuyler	NY28	2676
31097026460000	-77.0308	42.4682	30	24	641	23	NY	Schuyler	NY28	2637
31097026470000	-77.0301	42.4707	30	24	640	23	NY	Schuyler	NY28	2632
31097093800000	-77.0398	42.4739	26	20	618	18	NY	Schuyler	NY28	2609
31097093820000	-77.0027	42.4726	28	22	664	20	NY	Schuyler	NY28	2710
31097093830000	-77.0274	42.4750	30	24	638	24	NY	Schuyler	NY28	2627
31097094050000	-77.0419	42.4646	35	29	638	32	NY	Schuyler	NY28	2634
31097094070000	-77.0259	42.4687	35	29	638	31	NY	Schuyler	NY28	2646
31097094090000	-77.0320	42.4658	30	25	656	24	NY	Schuyler	NY28	2641
31097094100000	-77.0160	42.4771	31	25	612	26	NY	Schuyler	NY28	2655
31097094240000	-76.9935	42.4761	29	23	637	21	NY	Schuyler	NY28	2736
31097196920000	-76.9701	42.4326	59	74	2551	26	NY	Schuyler	NY28	2927
31097196920000	-76.9701	42.4326	68	82	2464	30	NY	Schuyler	NY28	2927
31097204170000	-76.9558	42.4372	68	83	2593	29	NY	Schuyler	NY28	2941

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31097214950000	-76.7136	42.2700	93	112	3603	29	NY	Schuyler	NY28	3572
31097214950000	-76.7136	42.2700	39	45	1473	24	NY	Schuyler	NY28	3572
31097214950000	-76.7136	42.2700	64	81	2920	25	NY	Schuyler	NY28	3572
31097217250000	-77.0039	42.4713	52	64	2107	26	NY	Schuyler	NY28	2709
31097217250000	-77.0039	42.4713	66	80	2522	28	NY	Schuyler	NY28	2709
31097217260000	-77.0028	42.4761	70	84	2491	30	NY	Schuyler	NY28	2703
31097227540000	-76.7316	42.4602	66	80	2438	29	NY	Schuyler	NY28	2796
31097227930000	-76.7355	42.5356	67	80	2295	31	NY	Schuyler	NY28	2513
31097227940000	-76.7047	42.4734	57	71	2332	26	NY	Schuyler	NY28	2736
31097227940100	-76.7047	42.4734	59	73	2349	27	NY	Schuyler	NY28	2736
31097227990000	-77.0582	42.4452	68	82	2450	30	NY	Schuyler	NY28	2705
31097227990100	-77.0582	42.4452	73	86	2364	33	NY	Schuyler	NY28	2705
31097228290000	-77.0602	42.3236	68	84	2804	27	NY	Schuyler	NY28	3238
31097228300000	-77.0805	42.3061	69	87	2970	26	NY	Schuyler	NY28	3326
31097228410000	-77.0204	42.3403	63	79	2644	26	NY	Schuyler	NY28	3167
31097228810000	-76.8158	42.3083	27	24	842	18	NY	Schuyler	NY28	3472
31097228810000	-76.8158	42.3083	65	81	2761	26	NY	Schuyler	NY28	3472
31097228860000	-76.8958	42.3092	66	82	2784	26	NY	Schuyler	NY28	3420
31097228860100	-76.8958	42.3092	74	90	2682	30	NY	Schuyler	NY28	3420
31097228860200	-76.8958	42.3092	73	88	2671	30	NY	Schuyler	NY28	3420
31097228930000	-76.8597	42.2952	66	82	2772	26	NY	Schuyler	NY28	3480
31097229350000	-76.7468	42.3304	68	84	2671	28	NY	Schuyler	NY28	3371
31097229350100	-76.7468	42.3304	67	82	2706	27	NY	Schuyler	NY28	3371
31097229350200	-76.7468	42.3304	63	78	2542	27	NY	Schuyler	NY28	3371
31097229420000	-76.9891	42.2960	77	94	3069	28	NY	Schuyler	NY28	3373
31097230040000	-76.9074	42.4448	36	40	1333	23	NY	Schuyler	NY28	2922
31097230040000	-76.9074	42.4448	61	73	2255	29	NY	Schuyler	NY28	2922
31097230080000	-76.8966	42.3125	39	45	1540	23	NY	Schuyler	NY28	3412
31097230080000	-76.8966	42.3125	57	71	2413	26	NY	Schuyler	NY28	3412
31097230530000	-76.9469	42.3353	57	73	2775	23	NY	Schuyler	NY28	3306
31097230530100	-76.9469	42.3353	56	72	2789	23	NY	Schuyler	NY28	3306
31097230720000	-77.0991	42.2835	77	93	2842	30	NY	Schuyler	NY28	3421
31097230720000	-77.0991	42.2835	36	42	1618	21	NY	Schuyler	NY28	3421
31097230860000	-77.0447	42.3034	65	81	2667	27	NY	Schuyler	NY28	3308
31097230860000	-77.0447	42.3034	42	50	1688	24	NY	Schuyler	NY28	3308
31097231520000	-76.9324	42.3428	57	73	2769	23	NY	Schuyler	NY28	3586
31097231520000	-76.9314	42.2267	61	75	2444	27	NY	Schuyler	NY28	3586
31097231590000	-76.9312	42.4354	49	56	1635	29	NY	Schuyler	NY28	2961
31097232300000	-77.0891	42.2869	27	23	801	18	NY	Schuyler	NY28	3409

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31097232300000	-77.0787	42.2808	40	45	1483	25	NY	Schuyler	NY28	3409
31097232300000	-77.0787	42.2808	54	68	2467	24	NY	Schuyler	NY28	3409
31097238130000	-77.0421	42.1931	63	78	2604	26	NY	Schuyler	NY28	3669
31097238230000	-77.0330	42.3265	46	54	1685	27	NY	Schuyler	NY28	3210
31097238360000	-77.0688	42.2928	30	27	832	22	NY	Schuyler	NY28	3360
31097238370000	-77.0739	42.2892	26	23	849	17	NY	Schuyler	NY28	3377
31097238560000	-77.0792	42.2813	31	28	866	22	NY	Schuyler	NY28	3408
31097611880000	-76.8965	42.4195	24	21	774	15	NY	Schuyler	NY28	3026
31099136750000	-76.8375	42.8646	30	26	767	22	NY	Seneca	NY28	1526
31099196240000	-76.8483	42.7915	24	20	777	14	NY	Seneca	NY28	1691
31099196720000	-76.8326	42.8000	28	24	762	20	NY	Seneca	NY28	1697
31099196860000	-76.8440	42.5882	43	46	1249	30	NY	Seneca	NY28	2393
31099204460000	-76.8082	42.7086	48	58	1940	25	NY	Seneca	NY28	2084
31099227610000	-76.8367	42.8393	57	64	1655	33	NY	Seneca	NY28	1589
31099227620000	-76.8517	42.8601	53	59	1525	33	NY	Seneca	NY28	1517
31099229090000	-76.8190	42.5530	62	75	2339	28	NY	Seneca	NY28	2490
31099229090000	-76.8190	42.5530	28	26	856	20	NY	Seneca	NY28	2490
31099229090100	-76.8190	42.5530	61	74	2220	29	NY	Seneca	NY28	2490
31099229500000	-76.7020	42.5642	63	76	2285	29	NY	Seneca	NY28	2452
31099229500100	-76.7020	42.5642	59	72	2276	28	NY	Seneca	NY28	2452
31099230660000	-76.8781	42.8238	26	21	709	17	NY	Seneca	NY28	1567
31099231250000	-76.8056	42.8874	24	18	601	14	NY	Seneca	NY28	1513
31099231290000	-76.8826	42.8906	23	17	610	12	NY	Seneca	NY28	1436
31099231410000	-76.8861	42.8862	22	15	609	11	NY	Seneca	NY28	1442
31099238750000	-76.8619	42.8274	26	21	724	17	NY	Seneca	NY28	1574
31099260030000	-76.8738	42.8278	28	23	720	20	NY	Seneca	NY28	1559
31101000330000	-77.6669	42.1650	46	50	1320	31	NY	Steuben	NY28	3552
31101001700000	-77.2782	42.0772	41	42	1177	28	NY	Steuben	NY28	4005
31101039240000	-77.4304	42.0631	92	111	4114	25	NY	Steuben	NY28	3982
31101045730000	-77.2223	42.2355	32	28	764	25	NY	Steuben	NY28	3527
31101132430000	-77.0820	42.1876	37	38	1078	27	NY	Steuben	NY28	3699
31101136990000	-77.2651	42.4662	38	39	1173	26	NY	Steuben	NY28	2689
31101136990000	-77.2651	42.4662	39	44	1418	24	NY	Steuben	NY28	2689
31101136990000	-77.2651	42.4662	64	81	2811	26	NY	Steuben	NY28	2689
31101136990000	-77.2651	42.4662	68	85	2985	25	NY	Steuben	NY28	2689
31101154380000	-77.2158	42.5394	62	76	2423	28	NY	Steuben	NY28	2612
31101161020000	-77.3175	42.3261	34	33	906	26	NY	Steuben	NY28	3181
31101175300000	-77.2381	42.0890	38	42	1383	24	NY	Steuben	NY28	3981
31101194970000	-77.2159	42.5408	56	70	2402	25	NY	Steuben	NY28	2608

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31101206580000	-77.6899	42.3067	33	33	1066	23	NY	Steuben	NY28	3060
31101214680000	-77.4532	42.4197	38	43	1472	23	NY	Steuben	NY28	2825
31101214680000	-77.4532	42.4197	59	73	2508	26	NY	Steuben	NY28	2825
31101214680000	-77.4532	42.4197	67	84	3014	25	NY	Steuben	NY28	2825
31101214960000	-77.4632	42.4053	34	34	1058	24	NY	Steuben	NY28	2838
31101214960000	-77.4632	42.4053	42	45	1285	28	NY	Steuben	NY28	2838
31101214960000	-77.4632	42.4053	68	85	3064	25	NY	Steuben	NY28	2838
31101215920000	-77.2367	42.5406	55	67	2187	27	NY	Steuben	NY28	2571
31101216010000	-77.4534	42.4334	62	78	2734	25	NY	Steuben	NY28	2810
31101216010000	-77.4534	42.4334	73	90	2983	27	NY	Steuben	NY28	2810
31101216010000	-77.4534	42.4334	38	43	1404	24	NY	Steuben	NY28	2810
31101216240000	-77.4672	42.4201	74	90	2805	29	NY	Steuben	NY28	2821
31101216240000	-77.4672	42.4201	43	48	1413	28	NY	Steuben	NY28	2821
31101216240000	-77.4672	42.4201	52	63	2129	26	NY	Steuben	NY28	2821
31101216330000	-77.4456	42.4279	58	71	2256	27	NY	Steuben	NY28	2819
31101216330000	-77.4456	42.4279	68	86	3033	25	NY	Steuben	NY28	2819
31101216330000	-77.4456	42.4279	41	45	1402	26	NY	Steuben	NY28	2819
31101216360000	-77.4657	42.4290	83	101	3029	30	NY	Steuben	NY28	2813
31101216360000	-77.4657	42.4290	38	43	1409	24	NY	Steuben	NY28	2813
31101216880000	-77.2519	42.5344	54	66	2229	26	NY	Steuben	NY28	2546
31101216890000	-77.2750	42.5388	56	69	2286	26	NY	Steuben	NY28	2486
31101216890100	-77.2750	42.5388	54	66	2161	26	NY	Steuben	NY28	2486
31101216920000	-77.1822	42.5399	62	74	2161	30	NY	Steuben	NY28	2602
31101217040000	-77.1112	42.4394	64	79	2447	28	NY	Steuben	NY28	2823
31101217050000	-77.1980	42.5435	54	67	2167	27	NY	Steuben	NY28	2604
31101217070000	-77.3030	42.5378	59	73	2347	27	NY	Steuben	NY28	2482
31101217070200	-77.3030	42.5378	59	72	2271	28	NY	Steuben	NY28	2482
31101217100000	-77.1723	42.5472	54	64	1861	29	NY	Steuben	NY28	2564
31101217120000	-77.2598	42.5393	59	73	2344	27	NY	Steuben	NY28	2516
31101217150000	-77.3412	42.5237	59	73	2402	27	NY	Steuben	NY28	2577
31101217180000	-77.5940	42.0956	53	65	2140	26	NY	Steuben	NY28	3761
31101217180000	-77.5940	42.0956	70	89	3403	23	NY	Steuben	NY28	3761
31101227410000	-77.2055	42.4939	56	69	2286	26	NY	Steuben	NY28	2713
31101227450000	-77.2418	42.5003	57	70	2247	27	NY	Steuben	NY28	2633
31101227470000	-77.2090	42.5103	56	68	2268	26	NY	Steuben	NY28	2681
31101227480000	-77.1918	42.5107	54	66	2204	26	NY	Steuben	NY28	2674
31101227550000	-77.1658	42.5188	52	63	2078	26	NY	Steuben	NY28	2623
31101227560000	-77.2037	42.4823	73	87	2392	32	NY	Steuben	NY28	2734
31101227580100	-77.4539	42.5494	54	67	2248	26	NY	Steuben	NY28	2661

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31101227590000	-77.4002	42.5334	49	63	2405	22	NY	Steuben	NY28	2664
31101227590100	-77.4002	42.5334	59	73	2426	26	NY	Steuben	NY28	2664
31101227590200	-77.4002	42.5334	59	73	2483	26	NY	Steuben	NY28	2664
31101227600000	-77.4184	42.5423	56	69	2383	25	NY	Steuben	NY28	2663
31101227600100	-77.4184	42.5423	56	70	2406	25	NY	Steuben	NY28	2663
31101227650000	-77.2345	42.4932	56	69	2394	25	NY	Steuben	NY28	2665
31101227660000	-77.4410	42.5458	57	70	2329	26	NY	Steuben	NY28	2667
31101227680000	-77.2716	42.5336	54	67	2254	26	NY	Steuben	NY28	2503
31101227690000	-77.2277	42.5367	61	74	2311	28	NY	Steuben	NY28	2600
31101227710000	-77.0145	42.2148	69	86	2960	26	NY	Steuben	NY28	3583
31101227720000	-77.1718	42.5353	54	66	2179	26	NY	Steuben	NY28	2599
31101228140000	-77.0542	42.2049	76	94	3135	27	NY	Steuben	NY28	3627
31101228140100	-77.0542	42.2049	76	94	3062	28	NY	Steuben	NY28	3627
31101228250000	-77.0354	42.2127	70	86	2841	27	NY	Steuben	NY28	3594
31101228440000	-77.1755	42.4960	56	69	2282	26	NY	Steuben	NY28	2684
31101228440100	-77.1755	42.4960	64	77	2185	31	NY	Steuben	NY28	2684
31101228440200	-77.1755	42.4960	68	80	2165	33	NY	Steuben	NY28	2684
31101228450100	-77.1727	42.5090	53	65	2143	26	NY	Steuben	NY28	2651
31101228520000	-77.0864	42.2013	72	90	3188	25	NY	Steuben	NY28	3670
31101228590000	-77.5920	42.5357	57	70	2294	27	NY	Steuben	NY28	2635
31101228610000	-77.1646	42.1576	78	96	3206	27	NY	Steuben	NY28	3793
31101228610000	-77.1646	42.1576	41	43	1216	28	NY	Steuben	NY28	3793
31101228610100	-77.1646	42.1576	71	89	3061	26	NY	Steuben	NY28	3793
31101228710100	-76.9724	42.1672	63	80	3034	23	NY	Steuben	NY28	3802
31101228710100	-76.9724	42.1672	58	76	3034	22	NY	Steuben	NY28	3802
31101228710100	-76.9724	42.1672	61	78	3034	23	NY	Steuben	NY28	3802
31101228710100	-76.9724	42.1672	57	72	2650	24	NY	Steuben	NY28	3802
31101228710100	-76.9724	42.1672	55	71	2664	23	NY	Steuben	NY28	3802
31101228710100	-76.9724	42.1672	51	65	2509	22	NY	Steuben	NY28	3802
31101228710100	-76.9724	42.1672	57	75	3034	22	NY	Steuben	NY28	3802
31101228840000	-76.9767	42.2345	69	86	2908	27	NY	Steuben	NY28	3526
31101228840100	-76.9767	42.2345	72	89	2911	27	NY	Steuben	NY28	3526
31101228850000	-77.0662	42.1799	72	90	3063	26	NY	Steuben	NY28	3714
31101228920100	-76.9999	42.1776	72	90	3086	26	NY	Steuben	NY28	3748
31101229080000	-77.0964	42.2541	71	87	2942	27	NY	Steuben	NY28	3508
31101229490000	-77.3165	42.4972	60	75	2539	26	NY	Steuben	NY28	2585
31101229580000	-77.0821	42.1483	72	89	3105	26	NY	Steuben	NY28	3834
31101229630000	-77.0373	42.0504	39	45	1577	23	NY	Steuben	NY28	4185
31101229630000	-77.0373	42.0504	86	104	3560	27	NY	Steuben	NY28	4185

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31101229630100	-77.0373	42.0504	78	96	3506	25	NY	Steuben	NY28	4185
31101229630200	-77.0373	42.0504	80	99	3438	26	NY	Steuben	NY28	4185
31101229760000	-76.9961	42.2614	73	91	3164	26	NY	Steuben	NY28	3451
31101229780000	-77.6774	42.0322	79	96	3068	28	NY	Steuben	NY28	3905
31101229780000	-77.6774	42.0322	56	68	2186	27	NY	Steuben	NY28	3905
31101230380000	-77.0233	42.1574	73	90	2879	28	NY	Steuben	NY28	3835
31101230380000	-77.0233	42.1574	84	101	3084	30	NY	Steuben	NY28	3835
31101230380000	-77.0233	42.1574	48	58	1945	25	NY	Steuben	NY28	3835
31101230390000	-77.5449	42.3831	63	78	2621	26	NY	Steuben	NY28	2834
31101230400000	-77.0074	42.0898	77	95	3356	26	NY	Steuben	NY28	4087
31101230400000	-77.0074	42.0898	56	69	2287	26	NY	Steuben	NY28	4087
31101230540000	-77.0169	42.1786	65	82	2892	25	NY	Steuben	NY28	3737
31101230540000	-77.0169	42.1786	38	41	1335	24	NY	Steuben	NY28	3737
31101230540000	-77.0169	42.1786	83	100	3081	30	NY	Steuben	NY28	3737
31101230550000	-77.0036	42.1677	65	81	2816	26	NY	Steuben	NY28	3793
31101230550000	-77.0036	42.1677	43	52	1894	23	NY	Steuben	NY28	3793
31101230550000	-77.0036	42.1677	60	77	3012	23	NY	Steuben	NY28	3793
31101230590000	-77.1234	42.1978	39	47	1708	22	NY	Steuben	NY28	3706
31101230590000	-77.1234	42.1978	60	76	2713	25	NY	Steuben	NY28	3706
31101230850000	-77.1496	42.1644	67	84	2986	25	NY	Steuben	NY28	3783
31101230850000	-77.1496	42.1644	40	51	2016	21	NY	Steuben	NY28	3783
31101231000000	-77.0512	42.1631	41	50	1822	22	NY	Steuben	NY28	3799
31101231000000	-77.0512	42.1631	77	94	2888	29	NY	Steuben	NY28	3799
31101231010000	-77.1066	42.2898	41	50	1823	22	NY	Steuben	NY28	3407
31101231010000	-77.1066	42.2898	63	79	2790	25	NY	Steuben	NY28	3407
31101231050000	-77.0362	42.1145	79	96	3046	29	NY	Steuben	NY28	4006
31101231100000	-76.9780	42.0800	85	104	3431	28	NY	Steuben	NY28	4119
31101231500000	-77.1396	42.0971	71	89	3099	26	NY	Steuben	NY28	4013
31101231510000	-77.2431	42.4461	63	78	2486	28	NY	Steuben	NY28	2789
31101231510100	-77.2431	42.4461	69	84	2446	30	NY	Steuben	NY28	2789
31101231540000	-77.1441	42.2747	43	52	1892	23	NY	Steuben	NY28	3470
31101231540000	-77.1441	42.2747	73	89	2867	28	NY	Steuben	NY28	3470
31101231550000	-77.0930	42.1861	46	57	2054	23	NY	Steuben	NY28	3714
31101231550000	-77.0930	42.1861	77	95	3070	28	NY	Steuben	NY28	3714
31101231720000	-77.3352	42.4954	60	73	2341	28	NY	Steuben	NY28	2609
31101231870000	-76.9918	42.1612	42	54	2081	21	NY	Steuben	NY28	3830
31101231890000	-77.1391	42.2912	44	54	1853	24	NY	Steuben	NY28	3418
31101231890000	-77.1480	42.2828	53	63	1853	29	NY	Steuben	NY28	3418
31101231890000	-77.1480	42.2828	64	80	2632	27	NY	Steuben	NY28	3418

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31101231900000	-77.0073	42.1142	49	57	1776	27	NY	Steuben	NY28	4018
31101231900000	-77.0073	42.1142	86	103	2831	33	NY	Steuben	NY28	4018
31101232110000	-77.0069	42.0515	88	106	3468	28	NY	Steuben	NY28	4184
31101232270000	-76.9815	42.0704	53	65	2115	26	NY	Steuben	NY28	4141
31101232270000	-76.9815	42.0704	82	101	3351	27	NY	Steuben	NY28	4141
31101238120000	-77.5733	42.1145	43	49	1513	26	NY	Steuben	NY28	3705
31101238290000	-77.1491	42.2574	60	76	2673	25	NY	Steuben	NY28	3525
31101238290000	-77.1491	42.2574	49	59	1908	26	NY	Steuben	NY28	3525
31101238790000	-77.1078	42.1910	61	77	2722	25	NY	Steuben	NY28	3717
31101260110000	-77.1340	42.2685	63	80	2873	25	NY	Steuben	NY28	3490
31101260430000	-77.1947	42.2733	102	118	2801	39	NY	Steuben	NY28	3454
31101260610000	-77.0175	42.0239	79	98	3509	25	NY	Steuben	NY28	4257
31101260610000	-77.0175	42.0239	42	55	2202	21	NY	Steuben	NY28	4257
31107228200000	-76.1987	42.0459	39	45	1483	24	NY	Tioga	NY29	4252
31107228210000	-76.1910	42.0472	48	54	1533	30	NY	Tioga	NY29	4252
31107228600000	-76.1905	42.0499	36	41	1457	22	NY	Tioga	NY29	4244
31107228870000	-76.2006	42.0401	38	44	1529	23	NY	Tioga	NY29	4268
31107228950000	-76.2759	42.0233	43	50	1623	25	NY	Tioga	NY29	4274
31107228960000	-76.2084	42.0472	33	38	1471	20	NY	Tioga	NY29	4243
31107229000000	-76.2654	42.0239	36	42	1608	21	NY	Tioga	NY29	4274
31107229270000	-76.1910	42.0472	33	36	1280	21	NY	Tioga	NY29	4252
31107229320000	-76.1958	42.0428	32	35	1241	21	NY	Tioga	NY29	4263
31107229340000	-76.4098	42.0578	69	88	3521	22	NY	Tioga	NY29	4224
31107229340000	-76.4098	42.0578	49	63	2441	22	NY	Tioga	NY29	4224
31107229340100	-76.4098	42.0578	61	79	3390	21	NY	Tioga	NY29	4224
31107229730000	-76.2486	42.0253	35	41	1574	21	NY	Tioga	NY29	4280
31107229740000	-76.3132	42.1055	71	89	3152	25	NY	Tioga	NY29	4128
31107229740000	-76.3132	42.1055	32	35	1278	21	NY	Tioga	NY29	4128
31107231160000	-76.1864	42.1713	71	89	3098	26	NY	Tioga	NY29	3802
31107231160100	-76.1864	42.1713	71	88	3015	26	NY	Tioga	NY29	3802
31107231850000	-76.5324	42.1602	52	63	2121	26	NY	Tioga	NY29	3933
31107231850000	-76.5324	42.1602	67	84	2957	25	NY	Tioga	NY29	3933
31107231920000	-76.2640	42.0619	66	83	3044	24	NY	Tioga	NY29	4175
31107231920000	-76.2640	42.0619	61	75	2544	26	NY	Tioga	NY29	4175
31107238550001	-76.4411	42.1688	67	84	2990	25	NY	Tioga	NY29	3847
31107238550001	-76.4411	42.1688	48	59	2125	24	NY	Tioga	NY29	3847
31107238800000	-76.4784	42.2029	67	83	2692	27	NY	Tioga	NY29	3748
31107239270000	-76.5361	42.1920	70	87	2958	26	NY	Tioga	NY29	3793
31109039730000	-76.5060	42.3703	69	87	3179	24	NY	Tompkins	NY29	3296

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31109040070000	-76.5030	42.3655	75	90	2607	31	NY	Tompkins	NY29	3315
31109040070000	-76.5030	42.3655	66	80	2524	28	NY	Tompkins	NY29	3315
31109041300000	-76.5925	42.4422	66	81	2713	27	NY	Tompkins	NY29	2950
31109044670000	-76.5404	42.3844	72	89	2860	28	NY	Tompkins	NY29	3208
31109217110000	-76.3020	42.5217	26	21	656	18	NY	Tompkins	NY29	2823
31109217160000	-76.3007	42.5111	26	21	705	17	NY	Tompkins	NY29	2866
31109217160000	-76.3007	42.5111	58	71	2276	27	NY	Tompkins	NY29	2866
31109227530000	-76.6730	42.4904	55	68	2274	26	NY	Tompkins	NY29	2725
31109227670000	-76.6358	42.5120	56	68	2272	26	NY	Tompkins	NY29	2722
31109227890000	-76.2799	42.5429	57	70	2327	26	NY	Tompkins	NY29	2739
31109229970000	-76.5500	42.3273	71	87	2725	29	NY	Tompkins	NY29	3383
31109229970100	-76.5500	42.3273	71	87	2758	28	NY	Tompkins	NY29	3383
31109229970200	-76.5500	42.3273	73	89	2767	29	NY	Tompkins	NY29	3383
31109229980000	-76.6384	42.4246	59	74	2468	26	NY	Tompkins	NY29	2971
31109229980100	-76.6384	42.4246	59	74	2442	26	NY	Tompkins	NY29	2971
31109229980200	-76.6384	42.4246	59	74	2434	26	NY	Tompkins	NY29	2971
31109229980400	-76.6384	42.4246	53	67	2409	24	NY	Tompkins	NY29	2971
31111157250000	-74.1267	41.6625	30	32	1176	19	NY	Ulster	NY30	2613
31111157250000	-74.1267	41.6625	48	60	2142	24	NY	Ulster	NY30	2613
31115183700000	-73.5192	43.0174	36	33	841	29	NY	Washington	NY30	1779
31115183700000	-73.5192	43.0174	56	70	2366	26	NY	Washington	NY30	1779
31117050320000	-76.8958	43.0593	36	38	1193	24	NY	Wayne	NY28	1180
31117067190000	-76.9435	43.0291	34	37	1234	23	NY	Wayne	NY28	1233
31117230150000	-76.7673	43.1564	32	34	1207	21	NY	Wayne	NY28	1057
31117230180000	-76.7908	43.1743	33	34	1127	22	NY	Wayne	NY28	1040
31117230870000	-76.8302	43.0863	31	32	1139	20	NY	Wayne	NY28	1150
31117231480100	-76.8443	43.0836	34	34	1077	24	NY	Wayne	NY28	1152
31121032410000	-78.4480	42.5278	39	39	1026	29	NY	Wyoming	NY27	2183
31121040920000	-78.0799	42.6174	53	63	1945	28	NY	Wyoming	NY27	1935
31121041330000	-78.1167	42.8306	38	45	1642	22	NY	Wyoming	NY27	1566
31121043920000	-78.1975	42.7477	52	60	1742	29	NY	Wyoming	NY27	1781
31121044360000	-78.1384	42.8183	48	56	1706	28	NY	Wyoming	NY27	1602
31121044470000	-78.1498	42.8027	43	51	1721	25	NY	Wyoming	NY27	1634
31121044640000	-78.0964	42.8384	44	52	1713	25	NY	Wyoming	NY27	1531
31121045360000	-78.1382	42.8268	60	70	1900	32	NY	Wyoming	NY27	1591
31121072340000	-78.1111	42.7845	40	46	1495	24	NY	Wyoming	NY27	1620
31121072780000	-78.0909	42.7975	46	51	1516	28	NY	Wyoming	NY27	1570
31121109390000	-78.4176	42.7668	42	49	1652	25	NY	Wyoming	NY27	1711
31121121780000	-78.1749	42.7908	58	65	1623	35	NY	Wyoming	NY27	1677

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31121132780000	-78.3944	42.5347	51	61	2002	26	NY	Wyoming	NY27	2173
31121168870000	-78.3535	42.7995	24	20	732	15	NY	Wyoming	NY27	1685
31121171880000	-78.4128	42.7504	27	22	701	18	NY	Wyoming	NY27	1754
31121172610000	-78.3353	42.7345	25	19	655	16	NY	Wyoming	NY27	1799
31121176230000	-78.3919	42.7437	25	22	824	15	NY	Wyoming	NY27	1793
31121179950000	-78.3684	42.8593	21	15	617	10	NY	Wyoming	NY27	1528
31121179970000	-78.3717	42.8505	22	16	609	11	NY	Wyoming	NY27	1550
31121180570000	-78.3489	42.8221	23	18	705	13	NY	Wyoming	NY27	1638
31121180590000	-78.3533	42.7785	27	24	804	19	NY	Wyoming	NY27	1726
31121181480000	-78.3741	42.7971	22	18	757	11	NY	Wyoming	NY27	1691
31121181490000	-78.3907	42.7264	28	26	856	20	NY	Wyoming	NY27	1832
31121181730000	-78.4151	42.7592	27	23	779	18	NY	Wyoming	NY27	1731
31121182000000	-78.3171	42.8203	22	18	752	12	NY	Wyoming	NY27	1623
31121182010000	-78.3938	42.7681	28	24	751	20	NY	Wyoming	NY27	1740
31121182020000	-78.3559	42.7703	27	24	830	18	NY	Wyoming	NY27	1744
31121182300000	-78.3796	42.8007	25	21	736	16	NY	Wyoming	NY27	1681
31121184070000	-78.0845	42.6525	26	22	741	17	NY	Wyoming	NY27	1822
31121185550000	-78.3565	42.5547	33	34	1124	23	NY	Wyoming	NY27	2130
31121189340000	-78.1942	42.8053	27	24	805	19	NY	Wyoming	NY27	1661
31121190070000	-78.4015	42.7410	25	22	826	16	NY	Wyoming	NY27	1789
31121190640000	-78.0877	42.6513	26	22	760	17	NY	Wyoming	NY27	1826
31121199370000	-78.1889	42.6978	44	52	1724	25	NY	Wyoming	NY27	1858
31121199380000	-78.2006	42.7325	31	30	952	22	NY	Wyoming	NY27	1815
31121218400000	-78.1101	42.8172	24	20	792	14	NY	Wyoming	NY27	1573
31121219000000	-78.0547	42.8308	39	45	1548	23	NY	Wyoming	NY27	1494
31121219070000	-78.1165	42.8179	42	49	1638	25	NY	Wyoming	NY27	1580
31121219080000	-78.1058	42.8199	41	47	1569	25	NY	Wyoming	NY27	1564
31121219450000	-78.1045	42.8161	42	48	1607	25	NY	Wyoming	NY27	1566
31121219620000	-78.0485	42.8315	42	49	1567	25	NY	Wyoming	NY27	1489
31121219640000	-78.0683	42.8214	42	49	1600	25	NY	Wyoming	NY27	1512
31121220420000	-78.0993	42.8220	42	48	1584	25	NY	Wyoming	NY27	1552
31121220460000	-78.0987	42.8177	41	47	1539	24	NY	Wyoming	NY27	1556
31121220530000	-78.1131	42.8139	44	51	1614	26	NY	Wyoming	NY27	1581
31121225200000	-78.4386	42.5536	51	60	1918	27	NY	Wyoming	NY27	2137
31121226550000	-78.4585	42.5771	39	48	1835	21	NY	Wyoming	NY27	2081
31121233890000	-78.4439	42.5648	69	79	1886	37	NY	Wyoming	NY27	2113
31121241510000	-78.0909	42.6245	24	21	846	14	NY	Wyoming	NY27	1906
31121682600000	-78.4595	42.8157	23	17	614	13	NY	Wyoming	NY27	1554
31121682770000	-78.4581	42.8137	23	17	611	13	NY	Wyoming	NY27	1559

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31121682820000	-78.4684	42.8034	25	19	626	16	NY	Wyoming	NY27	1574
31121682840000	-78.4621	42.8176	22	16	601	11	NY	Wyoming	NY27	1548
31121683050000	-78.4238	42.8244	38	32	613	37	NY	Wyoming	NY27	1579
31123006280000	-77.0910	42.4957	30	24	625	24	NY	Yates	NY28	2607
31123006330000	-77.0682	42.4921	29	24	669	22	NY	Yates	NY28	2585
31123010960000	-77.0873	42.4853	29	23	621	22	NY	Yates	NY28	2634
31123227430000	-76.9723	42.5074	54	66	2207	26	NY	Yates	NY28	2742
31123227500000	-77.0873	42.4933	75	88	2303	34	NY	Yates	NY28	2610
31123227520000	-77.0824	42.5285	65	78	2299	30	NY	Yates	NY28	2505
31123227570000	-77.2463	42.6457	54	66	2221	26	NY	Yates	NY28	2237
31123227570100	-77.2463	42.6457	53	65	2178	26	NY	Yates	NY28	2237
31123227640000	-77.2785	42.6320	51	61	1973	26	NY	Yates	NY28	2274
31123227640100	-77.2785	42.6320	47	56	1832	26	NY	Yates	NY28	2274
31123227640200	-77.2785	42.6320	48	57	1872	26	NY	Yates	NY28	2274
31123227730000	-77.0817	42.5241	61	74	2316	28	NY	Yates	NY28	2515
31123227730100	-77.0817	42.5241	62	76	2332	29	NY	Yates	NY28	2515
31123227740000	-77.0826	42.5308	53	65	2164	26	NY	Yates	NY28	2500
31123227750100	-77.1519	42.6141	47	55	1755	26	NY	Yates	NY28	2318
31123227760000	-77.0730	42.5514	41	53	2188	20	NY	Yates	NY28	2437
31123227900000	-77.0622	42.5820	60	73	2261	28	NY	Yates	NY28	2360
31123227900100	-77.0622	42.5820	56	68	2132	28	NY	Yates	NY28	2360
31123227910000	-77.0579	42.5764	64	76	2160	31	NY	Yates	NY28	2372
31123227910100	-77.0579	42.5764	54	66	2091	27	NY	Yates	NY28	2372
31123227950000	-77.0466	42.5345	64	76	2235	30	NY	Yates	NY28	2473
31123227950100	-77.0466	42.5345	61	73	2262	28	NY	Yates	NY28	2473
31123227960000	-77.0398	42.5481	67	80	2281	31	NY	Yates	NY28	2446
31123227960000	-77.0398	42.5481	58	70	2122	29	NY	Yates	NY28	2446
31123227960100	-77.0398	42.5481	66	79	2322	30	NY	Yates	NY28	2446
31123227970000	-77.1660	42.5835	52	63	2099	26	NY	Yates	NY28	2413
31123228280000	-77.1043	42.6724	54	65	2025	28	NY	Yates	NY28	2094
31123228400000	-77.1677	42.5980	64	74	1847	35	NY	Yates	NY28	2368
31123228500000	-77.3167	42.6180	53	65	2175	26	NY	Yates	NY28	2333
31123228580000	-77.2771	42.6391	66	75	1860	36	NY	Yates	NY28	2256
31123228580100	-77.2772	42.6379	69	79	1833	38	NY	Yates	NY28	2259
31123229030000	-77.1332	42.7050	38	47	1770	21	NY	Yates	NY28	1956
31123229030100	-77.1332	42.7050	46	54	1754	26	NY	Yates	NY28	1956
31123229390100	-77.2872	42.7464	51	57	1616	30	NY	Yates	NY28	1949
31123229390200	-77.2872	42.7464	47	54	1646	28	NY	Yates	NY28	1949
31123229400000	-77.1113	42.6276	51	61	1940	27	NY	Yates	NY28	2265

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31123229410000	-76.9565	42.5240	60	72	2189	29	NY	Yates	NY28	2742
31123229410100	-76.9565	42.5240	70	79	1844	38	NY	Yates	NY28	2742
31123231360000	-77.0222	42.5864	58	67	1759	33	NY	Yates	NY28	2406
31123260770100	-77.0564	42.5384	72	85	2200	34	NY	Yates	NY28	2462
37009200090000	-78.5931	40.3032	45	57	2129	17	PA	BEDFORD	PA18	7488
37009200340000	-78.6179	40.1032	56	72	2825	16	PA	BEDFORD	PA18	7351
37009200430000	-78.6293	40.1018	73	92	3531	18	PA	BEDFORD	PA18	7292
37009900020000	-78.6193	40.1069	54	68	2391	19	PA	BEDFORD	PA18	7343
37013200060000	-78.3634	40.6233	48	56	1775	22	PA	BLAIR	PA18	7197
37013200070000	-78.1728	40.7393	34	34	1021	24	PA	BLAIR	PA18	7053
37013200080000	-78.3654	40.6529	58	75	2812	18	PA	BLAIR	PA18	7443
37027200010000	-77.6014	40.9941	70	87	4766	13	PA	CENTRE	PA18	7102
37027200050000	-77.8978	40.9676	59	71	2174	23	PA	CENTRE	PA18	6708
37027200060000	-77.8424	41.0148	68	86	3405	17	PA	CENTRE	PA18	6873
37027200070000	-77.8495	41.0086	73	92	3979	16	PA	CENTRE	PA18	6828
37027200080000	-77.8587	41.0259	71	90	3405	18	PA	CENTRE	PA18	6863
37027200120000	-77.8455	40.9693	40	52	2102	15	PA	CENTRE	PA18	6571
37027200140000	-77.8454	40.9694	59	74	2625	19	PA	CENTRE	PA18	6571
37027200150000	-77.8176	40.9857	47	59	2191	17	PA	CENTRE	PA18	6728
37027200160000	-78.0175	40.8987	60	79	3500	15	PA	CENTRE	PA18	6908
37027200220000	-78.1582	40.8174	84	103	4214	18	PA	CENTRE	PA18	7018
37027200270000	-78.1283	40.8452	53	65	2129	21	PA	CENTRE	PA18	6908
37027200280000	-78.0829	40.9072	50	62	2200	19	PA	CENTRE	PA18	6841
37027200290000	-78.0089	40.9275	47	59	2172	18	PA	CENTRE	PA18	6923
37027200350000	-77.8353	41.0581	31	36	1467	15	PA	CENTRE	PA18	6771
37027200570000	-78.1034	40.8578	47	59	2168	18	PA	CENTRE	PA18	6904
37027200580000	-78.0143	40.9131	47	59	2193	17	PA	CENTRE	PA18	7006
37027200690000	-78.0787	40.8598	51	64	2183	19	PA	CENTRE	PA18	6966
37027200700000	-78.0522	40.8639	47	59	2148	18	PA	CENTRE	PA18	6979
37027200750000	-78.0844	40.9013	52	65	2199	20	PA	CENTRE	PA18	6830
37027200780000	-77.8359	41.0660	33	39	1512	16	PA	CENTRE	PA18	6715
37027200860000	-77.8402	41.0625	44	50	1468	24	PA	CENTRE	PA18	6738
37027200880000	-78.0871	40.9051	50	62	2185	19	PA	CENTRE	PA18	6819
37027201020000	-78.0872	40.9108	44	57	2205	16	PA	CENTRE	PA18	6846
37027201030000	-78.1148	40.9185	52	65	2202	20	PA	CENTRE	PA18	6807
37027201160000	-78.1168	40.9145	47	59	2196	17	PA	CENTRE	PA18	6816
37027201200000	-78.0831	40.9153	51	63	2193	19	PA	CENTRE	PA18	6849
37027201210000	-78.1318	40.8613	48	60	2195	18	PA	CENTRE	PA18	6847
37027201560000	-78.1159	40.8493	43	55	2129	16	PA	CENTRE	PA18	6878

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37027201570000	-78.1198	40.8650	48	61	2204	18	PA	CENTRE	PA18	6843
37027201580000	-78.1217	40.9198	47	59	2190	17	PA	CENTRE	PA18	6771
37027201590000	-78.0894	40.9268	51	62	2145	19	PA	CENTRE	PA18	6867
37027201600000	-78.0243	40.9321	42	54	2201	15	PA	CENTRE	PA18	6906
37027202830000	-77.7644	41.1243	41	46	1498	21	PA	CENTRE	PA18	6723
37027202910000	-77.8071	41.0875	41	46	1502	21	PA	CENTRE	PA18	6700
37027202920000	-77.8033	41.0917	39	45	1512	20	PA	CENTRE	PA18	6688
37027204830000	-77.8558	41.1510	31	39	1682	13	PA	CENTRE	PA18	6804
37027204870000	-77.8887	41.0235	34	43	1792	14	PA	CENTRE	PA18	6801
37027205820000	-78.0385	40.9695	40	52	2162	14	PA	CENTRE	PA18	6732
37027206440000	-77.9870	41.0985	59	74	2516	20	PA	CENTRE	PA18	6494
37027206850000	-78.0983	41.1073	29	34	1433	14	PA	CENTRE	PA18	6089
37027207770000	-78.0340	41.0705	27	32	1444	12	PA	CENTRE	PA18	6323
37027209230000	-77.9674	41.0658	34	39	1490	17	PA	CENTRE	PA18	6645
37027209660000	-78.0033	41.0939	34	38	1383	18	PA	CENTRE	PA18	6381
37027209680000	-77.9930	41.1033	37	42	1403	20	PA	CENTRE	PA18	6460
37027209940000	-77.9739	41.0910	37	41	1329	21	PA	CENTRE	PA18	6361
37027209970000	-77.9669	41.1009	34	39	1426	17	PA	CENTRE	PA18	6633
37027210210000	-77.9539	41.0030	36	41	1466	18	PA	CENTRE	PA18	6678
37027210250000	-77.9918	41.0856	37	42	1423	20	PA	CENTRE	PA18	6486
37027210260000	-77.9953	41.0827	36	41	1420	19	PA	CENTRE	PA18	6466
37027210300000	-78.0553	41.0925	34	39	1436	17	PA	CENTRE	PA18	6214
37027210310000	-77.8869	41.1009	36	42	1561	17	PA	CENTRE	PA18	6712
37027210320000	-77.9142	41.0965	33	38	1428	17	PA	CENTRE	PA18	6756
37027210330000	-77.9827	41.0866	33	38	1423	17	PA	CENTRE	PA18	6555
37027210340000	-77.9781	41.0885	32	37	1395	17	PA	CENTRE	PA18	6569
37027210350000	-77.9870	41.0841	34	39	1426	18	PA	CENTRE	PA18	6520
37027210360000	-77.9055	41.0973	33	38	1448	16	PA	CENTRE	PA18	6745
37027210380000	-77.8942	41.0952	34	39	1448	17	PA	CENTRE	PA18	6702
37027210390000	-77.8925	41.0696	36	41	1507	18	PA	CENTRE	PA18	6708
37027210410000	-77.8880	41.0690	34	40	1488	17	PA	CENTRE	PA18	6694
37027210440000	-77.8835	41.0693	34	40	1455	17	PA	CENTRE	PA18	6660
37027210460000	-78.0122	41.1121	33	37	1404	17	PA	CENTRE	PA18	6322
37027210470000	-78.0507	41.0799	29	33	1413	14	PA	CENTRE	PA18	6250
37027210590000	-77.9096	41.0965	31	35	1409	15	PA	CENTRE	PA18	6735
37027210640000	-77.9638	41.0932	31	35	1420	15	PA	CENTRE	PA18	6633
37027210650000	-77.9623	41.0990	31	35	1423	15	PA	CENTRE	PA18	6644
37027210690000	-78.0367	41.0942	28	32	1421	13	PA	CENTRE	PA18	6254
37027210700000	-77.9015	41.0957	34	39	1448	18	PA	CENTRE	PA18	6724

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37027210730000	-78.0379	41.0887	31	36	1436	15	PA	CENTRE	PA18	6257
37027210740000	-78.0097	41.0909	33	38	1405	17	PA	CENTRE	PA18	6364
37027210810000	-77.9684	41.0882	25	30	1412	11	PA	CENTRE	PA18	6596
37027210870000	-77.9860	41.0789	38	42	1411	20	PA	CENTRE	PA18	6516
37027210990000	-77.9333	41.0941	34	40	1451	18	PA	CENTRE	PA18	6800
37027211040000	-77.9225	41.0884	28	33	1468	13	PA	CENTRE	PA18	6751
37027211250000	-78.0434	41.0826	26	30	1423	12	PA	CENTRE	PA18	6251
37027211260000	-78.0323	41.0798	30	35	1433	15	PA	CENTRE	PA18	6307
37027211270000	-78.0328	41.0736	36	40	1420	19	PA	CENTRE	PA18	6313
37027211280000	-77.9599	41.0940	31	35	1411	15	PA	CENTRE	PA18	6670
37027211290000	-77.9592	41.0974	30	34	1399	15	PA	CENTRE	PA18	6656
37027211300000	-77.9632	41.0963	34	38	1416	17	PA	CENTRE	PA18	6625
37027211310000	-78.0330	41.0827	33	38	1442	17	PA	CENTRE	PA18	6317
37027211320000	-78.0166	41.0891	31	35	1408	15	PA	CENTRE	PA18	6319
37027211350000	-77.9533	41.0929	32	37	1447	16	PA	CENTRE	PA18	6721
37027211430000	-77.9547	41.0986	28	34	1474	13	PA	CENTRE	PA18	6708
37027211510000	-78.0578	41.0951	31	36	1472	15	PA	CENTRE	PA18	6224
37027211520000	-78.0771	41.0930	36	41	1472	18	PA	CENTRE	PA18	6192
37027211530000	-78.0811	41.0931	36	41	1434	19	PA	CENTRE	PA18	6167
37027211540000	-78.0147	41.0815	26	31	1435	12	PA	CENTRE	PA18	6379
37027211550000	-78.0135	41.0841	31	36	1434	15	PA	CENTRE	PA18	6368
37027211560000	-78.0074	41.0841	31	36	1420	16	PA	CENTRE	PA18	6372
37027211570000	-78.0677	41.0908	28	33	1436	13	PA	CENTRE	PA18	6200
37027211590000	-78.0149	41.0867	32	36	1414	16	PA	CENTRE	PA18	6337
37027211600000	-78.0112	41.0805	33	38	1438	17	PA	CENTRE	PA18	6393
37027211610000	-78.0105	41.0857	32	37	1419	16	PA	CENTRE	PA18	6357
37027211630000	-78.0075	41.0811	29	34	1434	14	PA	CENTRE	PA18	6395
37027211730000	-78.0067	41.0776	29	34	1447	14	PA	CENTRE	PA18	6435
37027211800000	-78.0025	41.1237	25	30	1394	12	PA	CENTRE	PA18	6354
37027211820000	-78.0223	41.0829	25	30	1429	11	PA	CENTRE	PA18	6338
37027211840000	-78.0019	41.1278	29	34	1420	14	PA	CENTRE	PA18	6346
37027211850000	-78.0365	41.0735	34	39	1420	18	PA	CENTRE	PA18	6303
37027212080000	-78.0184	41.0708	33	38	1448	16	PA	CENTRE	PA18	6384
37027212090000	-78.0752	41.0888	36	41	1472	18	PA	CENTRE	PA18	6201
37027212100000	-78.0730	41.0863	42	47	1481	22	PA	CENTRE	PA18	6204
37027212150000	-78.0894	41.0871	35	40	1464	18	PA	CENTRE	PA18	6200
37027212200000	-78.0836	41.0860	31	36	1498	14	PA	CENTRE	PA18	6213
37027212210000	-78.0818	41.0833	38	44	1487	20	PA	CENTRE	PA18	6190
37027212280000	-78.0787	41.0902	29	34	1459	14	PA	CENTRE	PA18	6203

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37027212310000	-78.0431	41.1043	31	36	1446	15	PA	CENTRE	PA18	6206
37009200040000	-78.3497	39.8405	38	43	1450	20	PA	BEDFORD	PA18	7985
37009200060000	-78.3907	39.8666	41	51	1961	16	PA	BEDFORD	PA18	8000
37009200080000	-78.3549	39.8278	43	48	1394	25	PA	BEDFORD	PA18	7964
37009200110000	-78.3586	39.8217	48	54	1518	26	PA	BEDFORD	PA18	7960
37009200120000	-78.4059	39.8366	43	53	1843	19	PA	BEDFORD	PA18	8052
37009200130000	-78.6044	39.9456	36	33	855	31	PA	BEDFORD	PA18	7368
37009200140000	-78.4076	39.8432	44	54	1832	19	PA	BEDFORD	PA18	8007
37009200150000	-78.3421	39.8521	43	48	1468	23	PA	BEDFORD	PA18	7985
37009200160000	-78.4013	39.8519	52	61	1848	23	PA	BEDFORD	PA18	8001
37009200170000	-78.3705	39.7956	47	54	1619	24	PA	BEDFORD	PA18	7936
37009200220000	-78.4183	39.8185	39	47	1762	17	PA	BEDFORD	PA18	7996
37009200240000	-78.4190	39.7724	43	50	1612	21	PA	BEDFORD	PA18	7951
37009200250000	-78.3631	39.8092	47	53	1492	26	PA	BEDFORD	PA18	7944
37009200260000	-78.3738	39.8863	36	47	2053	13	PA	BEDFORD	PA18	7999
37009200280000	-78.4238	39.8105	42	51	1797	18	PA	BEDFORD	PA18	7980
37009200290000	-78.3412	39.8272	46	55	1910	19	PA	BEDFORD	PA18	8055
37009200310000	-78.4476	39.7243	42	47	1503	22	PA	BEDFORD	PA18	7916
37009200320000	-78.4478	39.7488	37	45	1699	17	PA	BEDFORD	PA18	7900
37009200330000	-78.4517	39.7418	31	39	1684	13	PA	BEDFORD	PA18	7912
37009200540000	-78.3275	39.9413	56	68	2192	21	PA	BEDFORD	PA18	7909
37009200580000	-78.2418	40.0478	49	63	2393	17	PA	BEDFORD	PA18	7837
37009200590000	-78.4072	39.8738	48	59	1976	20	PA	BEDFORD	PA18	7965
37009200630000	-78.4256	39.7487	42	53	2092	16	PA	BEDFORD	PA18	8125
37009200770000	-78.3386	39.8906	42	51	1902	17	PA	BEDFORD	PA18	8003
37057200040000	-78.0965	39.9546	31	29	873	25	PA	FULTON	PA18	8448
37067200010000	-77.2808	40.6864	59	75	2660	19	PA	JUNIATA	PA18	6882
37087200020000	-77.6285	40.5116	64	83	4086	13	PA	MIFFLIN	PA18	6974
37047000180000	-78.3888	41.2521	37	41	1368	20	PA	ELK	PA21	5888
37047000360000	-78.3968	41.2631	62	72	1915	28	PA	ELK	PA21	5602
37047000550000	-78.4157	41.2554	26	20	629	27	PA	ELK	PA21	5609
37047200050000	-78.6488	41.2452	57	67	1964	24	PA	ELK	PA21	5455
37047200060000	-78.6539	41.2412	27	22	711	25	PA	ELK	PA21	5443
37047200420000	-78.4549	41.2547	70	82	2167	28	PA	ELK	PA21	5736
37047200510000	-78.3384	41.4024	52	63	2102	20	PA	ELK	PA21	5345
37047200800000	-79.0191	41.4243	22	17	688	18	PA	ELK	PA21	4289
37047200830000	-79.0175	41.4255	18	13	715	13	PA	ELK	PA21	4305
37047202850000	-78.5537	41.2825	32	30	917	25	PA	ELK	PA21	5327
37047202870000	-78.6926	41.4160	68	83	2472	24	PA	ELK	PA21	4701

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37047203060000	-78.4594	41.5037	54	65	1969	23	PA	ELK	PA21	5272
37047203080000	-78.8225	41.4290	42	51	1845	18	PA	ELK	PA21	4686
37047203280000	-78.4508	41.5074	76	87	2055	32	PA	ELK	PA21	5279
37047203340000	-78.7473	41.3636	59	70	2027	25	PA	ELK	PA21	4947
37047203830000	-78.5153	41.3077	61	73	2188	24	PA	ELK	PA21	5300
37047204030000	-78.2942	41.4001	57	67	1980	24	PA	ELK	PA21	5341
37047204070000	-78.9365	41.4398	54	64	1873	24	PA	ELK	PA21	4455
37047206460000	-78.5328	41.3475	31	32	1078	21	PA	ELK	PA21	5446
37047211620000	-78.5424	41.3515	25	22	822	19	PA	ELK	PA21	5431
37047214120000	-78.5471	41.3551	25	22	838	19	PA	ELK	PA21	5431
37047215330000	-78.7140	41.5662	63	74	1950	28	PA	ELK	PA21	4290
37047220220000	-78.5752	41.4930	20	15	655	17	PA	ELK	PA21	4922
37047220310000	-78.5391	41.3548	26	23	807	21	PA	ELK	PA21	5419
37047220330000	-78.4949	41.5708	25	22	791	21	PA	ELK	PA21	4810
37047220340000	-78.4832	41.5611	23	19	764	18	PA	ELK	PA21	4907
37047220350000	-78.4919	41.5649	25	21	748	22	PA	ELK	PA21	4822
37047220360000	-78.4708	41.5718	25	22	799	20	PA	ELK	PA21	4964
37047220390000	-78.5439	41.3478	22	18	778	17	PA	ELK	PA21	5358
37047220520000	-78.4664	41.5752	21	18	854	14	PA	ELK	PA21	4976
37047220530000	-78.4978	41.5664	26	22	801	21	PA	ELK	PA21	4826
37047220540000	-78.4972	41.5615	27	24	778	23	PA	ELK	PA21	4840
37047220890000	-78.5310	41.3513	27	23	805	22	PA	ELK	PA21	5446
37047220940000	-78.5422	41.3589	27	24	807	23	PA	ELK	PA21	5411
37047222440000	-78.5484	41.3590	22	19	824	16	PA	ELK	PA21	5398
37047222460000	-78.5746	41.4974	24	18	624	24	PA	ELK	PA21	4859
37047222470000	-78.5796	41.4913	24	19	641	24	PA	ELK	PA21	4904
37047222490000	-78.5558	41.3777	27	24	846	21	PA	ELK	PA21	5315
37047222510000	-78.5339	41.4009	28	25	838	23	PA	ELK	PA21	5327
37047222700000	-78.5512	41.3543	23	20	839	16	PA	ELK	PA21	5410
37047222720000	-78.5493	41.3459	23	20	812	17	PA	ELK	PA21	5421
37047222850000	-78.5328	41.3552	23	20	809	18	PA	ELK	PA21	5432
37047222890000	-78.8776	41.5939	23	19	744	19	PA	ELK	PA21	2325
37047225000000	-78.4980	41.3145	27	25	916	19	PA	ELK	PA21	5308
37047225040000	-78.4990	41.3179	28	26	916	21	PA	ELK	PA21	5351
37047226500000	-78.4731	41.3303	59	71	2131	24	PA	ELK	PA21	5286
37047228150000	-78.5718	41.3804	24	22	933	16	PA	ELK	PA21	5281
37047228460000	-78.8843	41.5943	27	22	711	25	PA	ELK	PA21	2441
37047228620000	-78.9119	41.4116	24	22	832	19	PA	ELK	PA21	4730
37047228650000	-78.5766	41.3831	26	23	869	19	PA	ELK	PA21	5270

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37047230870000	-78.8787	41.6031	26	22	746	23	PA	ELK	PA21	1636
37047231800000	-78.5427	41.4271	26	23	855	19	PA	ELK	PA21	5231
37047232250000	-78.9107	41.5108	27	24	797	23	PA	ELK	PA21	4371
37047232270000	-78.9232	41.5100	25	21	725	22	PA	ELK	PA21	4390
37047232290000	-78.9258	41.5083	27	23	768	23	PA	ELK	PA21	4434
37047232340000	-78.9193	41.5078	26	22	782	22	PA	ELK	PA21	4396
37047232360000	-78.9133	41.5088	27	23	794	22	PA	ELK	PA21	4368
37047232400000	-78.9146	41.5079	27	23	793	22	PA	ELK	PA21	4365
37047232430000	-78.9255	41.5072	26	22	760	23	PA	ELK	PA21	4415
37047232440000	-78.9223	41.5072	27	23	784	23	PA	ELK	PA21	4420
37047232500000	-78.9275	41.5085	26	22	747	23	PA	ELK	PA21	4430
37047232590000	-78.9162	41.5271	24	21	805	19	PA	ELK	PA21	4399
37047233020000	-78.6330	41.2568	24	23	992	15	PA	ELK	PA21	5437
37047233030000	-78.7159	41.2340	26	24	887	19	PA	ELK	PA21	5229
37047233140000	-78.6301	41.2591	27	24	823	21	PA	ELK	PA21	5440
37047233170000	-78.6150	41.2526	21	18	795	15	PA	ELK	PA21	5409
37047233180000	-78.6222	41.2571	25	22	826	19	PA	ELK	PA21	5443
37047233220000	-78.6271	41.2550	24	20	797	19	PA	ELK	PA21	5447
37047233230000	-78.6232	41.2532	24	21	796	19	PA	ELK	PA21	5441
37047233350000	-78.5535	41.5713	38	41	1221	24	PA	ELK	PA21	4502
37047233360000	-78.4230	41.4154	39	43	1327	23	PA	ELK	PA21	5428
37047233750000	-78.5691	41.3848	33	30	868	27	PA	ELK	PA21	5289
37047233760000	-78.5546	41.3701	32	30	859	27	PA	ELK	PA21	5344
37047234030000	-78.5517	41.3681	24	22	859	18	PA	ELK	PA21	5380
37047234770000	-78.9466	41.5852	27	24	806	23	PA	ELK	PA21	1951
37047234820000	-78.7308	41.5815	76	93	3196	21	PA	ELK	PA21	4421
37047234940000	-78.5514	41.3641	23	20	860	16	PA	ELK	PA21	5391
37047901370000	-78.2971	41.3232	59	70	1945	26	PA	ELK	PA21	5625
37053267680000	-78.9711	41.5223	29	27	842	24	PA	FOREST	PA21	3840
37053267690000	-78.9711	41.5241	28	25	848	22	PA	FOREST	PA21	3737
37053267700000	-78.9737	41.5241	28	25	841	22	PA	FOREST	PA21	3735
37053267710000	-78.9737	41.5300	28	25	814	23	PA	FOREST	PA21	3278
37053267720000	-78.9711	41.5297	28	25	843	22	PA	FOREST	PA21	3370
37053267730000	-78.9711	41.5278	26	23	842	20	PA	FOREST	PA21	3491
37053267740000	-78.9664	41.5286	28	26	842	23	PA	FOREST	PA21	3533
37053267770000	-78.9784	41.5323	24	20	759	20	PA	FOREST	PA21	3022
37053267780000	-78.9808	41.5324	25	22	805	20	PA	FOREST	PA21	3056
37053267810000	-78.9656	41.5381	26	22	768	22	PA	FOREST	PA21	3101
37053267820000	-78.9662	41.5365	26	22	749	23	PA	FOREST	PA21	3122

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37053267830000	-78.9632	41.5366	26	23	805	21	PA	FOREST	PA21	3286
37053267840000	-78.9901	41.5387	26	24	879	19	PA	FOREST	PA21	2612
37053267850000	-78.9878	41.5368	27	24	869	20	PA	FOREST	PA21	2751
37053267870000	-78.9902	41.5369	28	25	879	21	PA	FOREST	PA21	2765
37053267940000	-78.9752	41.5300	27	23	778	23	PA	FOREST	PA21	3233
37053267950000	-78.9777	41.5298	26	22	759	22	PA	FOREST	PA21	3202
37053267960000	-78.9786	41.5277	19	16	764	14	PA	FOREST	PA21	3376
37053268020000	-78.9718	41.5337	25	21	745	21	PA	FOREST	PA21	3024
37053268030000	-78.9738	41.5321	27	23	769	23	PA	FOREST	PA21	3096
37053268040000	-78.9712	41.5316	27	23	814	22	PA	FOREST	PA21	3216
37053268300000	-78.9640	41.5253	24	22	839	18	PA	FOREST	PA21	3765
37053268690000	-78.9837	41.5332	23	18	681	21	PA	FOREST	PA21	3010
37053274230000	-78.9576	41.5789	22	17	683	19	PA	FOREST	PA21	1896
37083293760000	-78.3116	41.6821	62	73	2003	27	PA	MC KEAN	PA21	4889
37083295300000	-78.6464	41.6823	56	67	2059	23	PA	MC KEAN	PA21	4073
37083313920000	-78.5403	41.6696	51	60	1878	22	PA	MC KEAN	PA21	4425
37083452980000	-78.3452	41.7325	27	24	800	23	PA	MC KEAN	PA21	4544
37083454670000	-78.2993	41.7919	29	25	701	29	PA	MC KEAN	PA21	3481
37083455170000	-78.2968	41.8187	29	24	697	28	PA	MC KEAN	PA21	1329
37083455180000	-78.3294	41.7473	30	27	825	25	PA	MC KEAN	PA21	4715
37083457800000	-78.3314	41.7497	38	37	977	29	PA	MC KEAN	PA21	4744
37083463750000	-78.3186	41.7476	25	20	675	24	PA	MC KEAN	PA21	4699
37083463760000	-78.3201	41.7500	29	23	666	30	PA	MC KEAN	PA21	4707
37083474290000	-78.5808	41.6637	20	15	670	16	PA	MC KEAN	PA21	4610
37083492590000	-78.3019	41.7620	24	21	831	18	PA	MC KEAN	PA21	4739
37083492610000	-78.3147	41.7561	23	20	831	17	PA	MC KEAN	PA21	4738
37039200640000	-80.3451	41.7297	51	62	2116	20	PA	CRAWFORD	PA21	2743
37039200900000	-80.4640	41.8166	43	53	1935	18	PA	CRAWFORD	PA21	2455
37039201080000	-80.3876	41.7582	31	33	1172	19	PA	CRAWFORD	PA21	2643
37039201170000	-80.4063	41.7851	43	53	1925	18	PA	CRAWFORD	PA21	2573
37039201190000	-80.4455	41.8375	43	52	1887	18	PA	CRAWFORD	PA21	2442
37039201310000	-79.8900	41.8367	68	81	2267	26	PA	CRAWFORD	PA21	3069
37039201360000	-80.4304	41.7727	46	56	1920	19	PA	CRAWFORD	PA21	2603
37039201510000	-79.9354	41.8246	71	83	2196	28	PA	CRAWFORD	PA21	3001
37039201530000	-80.3515	41.7734	51	63	2103	20	PA	CRAWFORD	PA21	2693
37039201700000	-80.4030	41.7678	32	34	1161	20	PA	CRAWFORD	PA21	2628
37039201750000	-80.4467	41.8107	48	58	1874	21	PA	CRAWFORD	PA21	2484
37039201760000	-80.4679	41.8241	29	30	1093	18	PA	CRAWFORD	PA21	2433
37039201800000	-80.4539	41.8363	44	53	1844	19	PA	CRAWFORD	PA21	2436

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37039201880000	-80.1872	41.8240	54	65	2097	21	PA	CRAWFORD	PA21	2797
37039204290000	-80.0187	41.8337	33	37	1314	19	PA	CRAWFORD	PA21	2908
37039208290000	-79.9883	41.5449	38	45	1613	18	PA	CRAWFORD	PA21	3537
37039209070000	-80.4117	41.7903	52	63	2059	21	PA	CRAWFORD	PA21	2562
37039211150000	-80.0490	41.4896	43	51	1697	20	PA	CRAWFORD	PA21	3636
37039211780000	-80.1162	41.5378	48	56	1722	23	PA	CRAWFORD	PA21	3466
37039211830000	-80.2424	41.7922	48	57	1757	22	PA	CRAWFORD	PA21	2774
37039211840000	-80.0676	41.6124	49	57	1773	23	PA	CRAWFORD	PA21	3400
37039211990000	-80.1360	41.5019	48	56	1730	22	PA	CRAWFORD	PA21	3498
37039212100000	-80.1659	41.5101	49	57	1768	23	PA	CRAWFORD	PA21	3453
37039212110000	-79.9828	41.6094	47	55	1712	22	PA	CRAWFORD	PA21	3398
37039212120000	-80.3494	41.5128	39	44	1415	22	PA	CRAWFORD	PA21	3221
37039214310000	-79.9718	41.5138	47	55	1722	22	PA	CRAWFORD	PA21	3683
37039215070000	-80.0029	41.4912	44	51	1686	21	PA	CRAWFORD	PA21	3643
37039217280000	-79.6918	41.7090	47	54	1679	22	PA	CRAWFORD	PA21	3577
37039217520000	-79.6222	41.7199	44	52	1695	21	PA	CRAWFORD	PA21	3589
37039217530000	-79.6169	41.7254	43	51	1704	20	PA	CRAWFORD	PA21	3601
37039217650000	-80.3105	41.5940	40	44	1385	22	PA	CRAWFORD	PA21	3107
37039218890000	-80.0457	41.5245	43	49	1523	22	PA	CRAWFORD	PA21	3446
37039220330000	-80.1914	41.8137	38	41	1282	22	PA	CRAWFORD	PA21	2806
37039220520000	-80.1732	41.5699	39	45	1504	20	PA	CRAWFORD	PA21	3373
37039223300000	-79.6145	41.7223	47	55	1695	22	PA	CRAWFORD	PA21	3601
37039223760000	-79.9258	41.5457	39	44	1385	22	PA	CRAWFORD	PA21	3664
37039223870000	-79.6373	41.6310	46	54	1721	22	PA	CRAWFORD	PA21	3668
37039224060000	-79.9190	41.5634	46	53	1676	22	PA	CRAWFORD	PA21	3625
37039224370000	-79.6227	41.6218	44	52	1687	21	PA	CRAWFORD	PA21	3688
37039224420000	-79.6374	41.6394	44	52	1723	21	PA	CRAWFORD	PA21	3725
37039224470000	-79.9825	41.7709	39	43	1375	22	PA	CRAWFORD	PA21	3064
37039224490000	-79.9346	41.5429	41	46	1458	22	PA	CRAWFORD	PA21	3657
37039224650000	-79.9318	41.5441	48	56	1728	22	PA	CRAWFORD	PA21	3672
37039224930000	-79.9145	41.5611	46	54	1705	22	PA	CRAWFORD	PA21	3652
37039225050000	-79.9311	41.5489	46	51	1425	26	PA	CRAWFORD	PA21	3642
37039225340000	-79.6488	41.7507	46	53	1680	22	PA	CRAWFORD	PA21	3537
37039225370000	-79.9101	41.5645	46	54	1687	22	PA	CRAWFORD	PA21	3644
37039225820000	-79.6384	41.6351	45	53	1741	21	PA	CRAWFORD	PA21	3745
37039226910000	-80.0396	41.7854	40	44	1350	23	PA	CRAWFORD	PA21	3000
37039226970000	-79.6280	41.6851	44	52	1706	21	PA	CRAWFORD	PA21	3650
37039228140000	-79.6227	41.7140	44	52	1699	21	PA	CRAWFORD	PA21	3603
37039228190000	-79.6188	41.6718	47	54	1705	22	PA	CRAWFORD	PA21	3651

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37039229150000	-79.9104	41.5578	46	53	1681	22	PA	CRAWFORD	PA21	3665
37039229240000	-79.6275	41.6689	43	51	1725	20	PA	CRAWFORD	PA21	3682
37039229250000	-79.9161	41.5567	46	53	1687	22	PA	CRAWFORD	PA21	3657
37039229390000	-79.9147	41.5713	46	53	1679	22	PA	CRAWFORD	PA21	3628
37039229400000	-79.9189	41.5691	46	53	1678	22	PA	CRAWFORD	PA21	3629
37039229540000	-79.6163	41.6639	44	52	1716	21	PA	CRAWFORD	PA21	3672
37039229580000	-79.6169	41.6782	45	53	1731	21	PA	CRAWFORD	PA21	3674
37039229600000	-79.6343	41.6871	44	52	1700	21	PA	CRAWFORD	PA21	3637
37039229610000	-79.6407	41.6869	44	52	1695	21	PA	CRAWFORD	PA21	3634
37039230760000	-80.1470	41.8056	38	42	1294	23	PA	CRAWFORD	PA21	2809
37039231050000	-79.8314	41.6406	41	48	1623	20	PA	CRAWFORD	PA21	3547
37039231070000	-79.8822	41.5780	47	54	1654	23	PA	CRAWFORD	PA21	3643
37039231350000	-79.9293	41.6399	39	46	1598	19	PA	CRAWFORD	PA21	3500
37039231360000	-79.8918	41.5795	47	55	1697	23	PA	CRAWFORD	PA21	3652
37039231520000	-79.8266	41.6348	45	52	1591	23	PA	CRAWFORD	PA21	3525
37039231530000	-79.8963	41.5715	43	51	1703	20	PA	CRAWFORD	PA21	3666
37039231690000	-79.6178	41.8173	43	49	1545	22	PA	CRAWFORD	PA21	3352
37039232290000	-79.9502	41.5934	43	50	1636	21	PA	CRAWFORD	PA21	3568
37039232460000	-79.7720	41.6650	43	50	1635	21	PA	CRAWFORD	PA21	3571
37039232550000	-79.9521	41.8023	39	43	1352	23	PA	CRAWFORD	PA21	3019
37039232850000	-79.8572	41.6806	45	52	1600	23	PA	CRAWFORD	PA21	3504
37039233260000	-79.7987	41.8070	42	48	1492	22	PA	CRAWFORD	PA21	3261
37039233330000	-79.8075	41.6374	46	53	1626	23	PA	CRAWFORD	PA21	3588
37039233910000	-79.6367	41.6751	44	52	1702	21	PA	CRAWFORD	PA21	3668
37039233970000	-79.6158	41.7725	46	53	1638	23	PA	CRAWFORD	PA21	3500
37039233980000	-79.6218	41.7746	42	49	1626	20	PA	CRAWFORD	PA21	3495
37039233990000	-79.6220	41.7805	42	49	1607	21	PA	CRAWFORD	PA21	3452
37039234380000	-80.3562	41.8439	36	37	1159	23	PA	CRAWFORD	PA21	2585
37039234820000	-80.3731	41.7489	53	64	2020	22	PA	CRAWFORD	PA21	2663
37039235390000	-80.4107	41.7897	54	66	2183	21	PA	CRAWFORD	PA21	2562
37039237970000	-79.8325	41.6058	40	47	1660	19	PA	CRAWFORD	PA21	3618
37039238120000	-79.6517	41.6520	42	50	1693	20	PA	CRAWFORD	PA21	3674
37039238430000	-80.3827	41.8248	43	52	1844	18	PA	CRAWFORD	PA21	2523
37039238470000	-80.3875	41.8207	46	55	1857	20	PA	CRAWFORD	PA21	2508
37039238480000	-80.0341	41.5155	41	47	1576	20	PA	CRAWFORD	PA21	3496
37039239720000	-79.9787	41.5139	44	52	1690	21	PA	CRAWFORD	PA21	3637
37039240010000	-79.9285	41.5791	43	51	1646	21	PA	CRAWFORD	PA21	3588
37039240390000	-80.3854	41.8162	48	58	1896	21	PA	CRAWFORD	PA21	2514
37039240480000	-79.6789	41.6627	42	49	1645	20	PA	CRAWFORD	PA21	3598

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37039241170000	-80.0784	41.5640	41	47	1583	20	PA	CRAWFORD	PA21	3483
37039244990000	-79.9965	41.5149	44	51	1682	21	PA	CRAWFORD	PA21	3633
37047235050000	-78.9372	41.6185	22	19	839	16	PA	ELK	PA21	4233
37047235060000	-78.9341	41.6199	23	17	626	22	PA	ELK	PA21	4232
37049200860000	-80.4695	41.8605	53	62	1800	25	PA	ERIE	PA21	2374
37049201090000	-80.0472	42.1428	42	51	1820	18	PA	ERIE	PA21	1853
37049201170000	-80.3554	41.8769	36	36	1075	25	PA	ERIE	PA21	2518
37049201320000	-80.3365	41.8763	33	34	1056	23	PA	ERIE	PA21	2507
37049201590000	-79.8895	42.0189	53	66	2275	19	PA	ERIE	PA21	2730
37049202180000	-80.4156	41.9127	28	28	998	19	PA	ERIE	PA21	2435
37049203260000	-80.0650	42.0512	29	24	726	27	PA	ERIE	PA21	2523
37049203270000	-80.0610	42.0468	29	25	742	27	PA	ERIE	PA21	2510
37049203450000	-79.8105	42.1573	47	56	1846	21	PA	ERIE	PA21	2584
37049203700000	-79.8268	41.9531	41	43	1229	26	PA	ERIE	PA21	2805
37049208120000	-79.8366	42.0658	39	40	1114	27	PA	ERIE	PA21	2634
37049208660000	-80.3544	41.8602	36	37	1129	24	PA	ERIE	PA21	2554
37049208770000	-80.3594	41.8594	34	35	1119	23	PA	ERIE	PA21	2553
37049208870000	-80.3721	41.8624	34	36	1127	23	PA	ERIE	PA21	2522
37049209340000	-80.3108	41.8577	36	36	1110	24	PA	ERIE	PA21	2601
37049209350000	-80.3021	41.8622	36	37	1123	24	PA	ERIE	PA21	2595
37049209360000	-80.3144	41.8522	34	36	1125	23	PA	ERIE	PA21	2590
37049209370000	-80.3065	41.8587	35	36	1115	23	PA	ERIE	PA21	2584
37049209380000	-80.3069	41.8637	36	37	1120	24	PA	ERIE	PA21	2590
37049209390000	-80.3074	41.8540	36	36	1088	24	PA	ERIE	PA21	2587
37049209650000	-80.3388	41.8524	36	37	1127	24	PA	ERIE	PA21	2577
37049210250000	-80.3671	41.8544	34	35	1117	23	PA	ERIE	PA21	2552
37049210900000	-80.3655	41.8610	36	36	1099	24	PA	ERIE	PA21	2536
37049211290000	-80.3434	41.8563	35	36	1111	23	PA	ERIE	PA21	2572
37049211370000	-80.3449	41.8525	34	35	1111	23	PA	ERIE	PA21	2575
37049214290000	-80.3473	41.8695	34	35	1088	23	PA	ERIE	PA21	2544
37049214380000	-80.3660	41.8648	36	36	1099	24	PA	ERIE	PA21	2528
37049214440000	-80.3730	41.8524	36	36	1109	24	PA	ERIE	PA21	2547
37049215100000	-80.2875	41.8553	37	38	1182	23	PA	ERIE	PA21	2636
37049215560000	-80.3787	41.8517	36	36	1102	24	PA	ERIE	PA21	2527
37049216080000	-80.3834	41.8515	34	35	1088	23	PA	ERIE	PA21	2514
37049216090000	-80.3893	41.8515	34	35	1089	23	PA	ERIE	PA21	2498
37049216150000	-80.3688	41.8584	35	36	1098	24	PA	ERIE	PA21	2537
37049216510000	-80.3794	41.8673	35	35	1064	24	PA	ERIE	PA21	2499
37049216620000	-80.3708	41.8792	34	34	1042	24	PA	ERIE	PA21	2482

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37049216910000	-80.2735	41.8714	36	38	1189	23	PA	ERIE	PA21	2638
37049216920000	-80.2801	41.8712	36	38	1189	23	PA	ERIE	PA21	2632
37049216940000	-80.2704	41.8743	36	38	1187	23	PA	ERIE	PA21	2640
37049216950000	-80.3388	41.8602	36	36	1105	24	PA	ERIE	PA21	2570
37049218140000	-80.4097	41.8747	34	34	1034	24	PA	ERIE	PA21	2407
37049218820000	-80.3825	41.8616	34	35	1056	24	PA	ERIE	PA21	2501
37049219230000	-80.4207	41.8659	33	33	1042	23	PA	ERIE	PA21	2409
37049219750000	-80.3434	41.8696	34	35	1063	24	PA	ERIE	PA21	2549
37049219830000	-80.3095	41.8735	36	37	1149	24	PA	ERIE	PA21	2583
37049219950000	-80.3908	41.8749	34	34	1034	24	PA	ERIE	PA21	2438
37049220940000	-80.3814	41.8745	34	34	1088	23	PA	ERIE	PA21	2484
37049220960000	-80.4150	41.8673	34	34	1023	25	PA	ERIE	PA21	2417
37049221170000	-80.3754	41.8883	34	34	1024	24	PA	ERIE	PA21	2448
37049221180000	-80.3789	41.8854	34	35	1051	24	PA	ERIE	PA21	2447
37049221190000	-80.3732	41.8848	34	34	1032	24	PA	ERIE	PA21	2456
37049221380000	-79.7151	41.9977	41	44	1334	24	PA	ERIE	PA21	2876
37049221440000	-80.2865	41.8710	37	38	1158	24	PA	ERIE	PA21	2618
37049222680000	-79.7258	41.9032	40	44	1340	23	PA	ERIE	PA21	2947
37049222890000	-80.3844	41.8659	34	34	1033	25	PA	ERIE	PA21	2490
37049222910000	-80.3691	41.8837	34	34	1052	24	PA	ERIE	PA21	2471
37049224560000	-80.0287	41.9318	42	44	1250	26	PA	ERIE	PA21	2736
37049224730000	-80.3770	41.8596	35	35	1080	24	PA	ERIE	PA21	2517
37049232480000	-80.3904	41.8695	33	34	1078	23	PA	ERIE	PA21	2484
37049232500000	-80.3848	41.8707	34	34	1082	23	PA	ERIE	PA21	2480
37049233130000	-80.2925	41.8748	36	37	1155	23	PA	ERIE	PA21	2606
37049237680000	-79.9933	41.9486	62	74	2239	24	PA	ERIE	PA21	2674
37049237980000	-80.3741	41.8667	37	37	1055	26	PA	ERIE	PA21	2510
37049239720000	-80.0177	41.9765	28	25	817	24	PA	ERIE	PA21	2688
37049240800000	-79.9186	41.8839	38	42	1294	23	PA	ERIE	PA21	2876
37049240990000	-80.3556	41.8854	33	34	1075	23	PA	ERIE	PA21	2489
37049241290000	-79.9144	42.1030	36	36	1072	25	PA	ERIE	PA21	2546
37049241420000	-79.9443	41.9868	36	38	1194	23	PA	ERIE	PA21	2713
37049243170000	-80.0015	41.8953	37	40	1254	23	PA	ERIE	PA21	2766
37049247920000	-79.7975	42.0222	37	39	1221	23	PA	ERIE	PA21	2751
37049247940000	-79.7813	42.0142	27	23	775	23	PA	ERIE	PA21	2730
37049247980000	-80.1530	41.9072	36	38	1209	22	PA	ERIE	PA21	2671
37049248660000	-79.7289	41.8877	41	46	1404	23	PA	ERIE	PA21	3029
37049249100000	-79.6946	41.9803	41	46	1412	23	PA	ERIE	PA21	2948
37049249460000	-79.6817	41.9802	39	43	1364	22	PA	ERIE	PA21	2904

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37049249470000	-79.8562	42.1806	30	28	921	23	PA	ERIE	PA21	2482
37049249530000	-79.8699	41.9112	34	37	1314	19	PA	ERIE	PA21	2902
37049249900000	-80.3917	41.8884	31	30	996	22	PA	ERIE	PA21	2427
37049249940000	-79.9991	41.9666	49	60	2010	20	PA	ERIE	PA21	2666
37049250580000	-79.6235	41.8772	38	44	1563	18	PA	ERIE	PA21	3249
37049250610000	-80.0870	42.0496	33	33	1058	22	PA	ERIE	PA21	2501
37049250720000	-79.6246	41.8855	40	46	1510	21	PA	ERIE	PA21	3193
37049250760000	-79.6272	41.8926	39	45	1504	20	PA	ERIE	PA21	3162
37049250770000	-79.6178	41.8927	41	46	1482	21	PA	ERIE	PA21	3152
37049250780000	-79.6307	41.8743	41	47	1537	21	PA	ERIE	PA21	3244
37049250850000	-79.6433	41.8997	41	46	1469	21	PA	ERIE	PA21	3118
37049250860000	-79.6456	41.8610	32	33	1096	21	PA	ERIE	PA21	3116
37049251020000	-79.6136	41.9111	43	47	1386	24	PA	ERIE	PA21	3030
37053208980000	-79.2350	41.5733	46	55	1837	20	PA	FOREST	PA21	3572
37053210830000	-79.2100	41.5969	46	56	1871	20	PA	FOREST	PA21	3938
37053212500000	-79.2679	41.5632	49	60	1976	20	PA	FOREST	PA21	4059
37053221850000	-79.3406	41.5845	46	55	1809	21	PA	FOREST	PA21	3909
37053262220000	-79.4152	41.6201	50	59	1836	22	PA	FOREST	PA21	3906
37053274210000	-79.0387	41.5830	29	27	840	24	PA	FOREST	PA21	4162
37053274250000	-78.9876	41.6004	26	20	636	26	PA	FOREST	PA21	4211
37053274750000	-79.0104	41.6035	18	12	660	13	PA	FOREST	PA21	4206
37053275160000	-78.9850	41.6031	19	13	616	16	PA	FOREST	PA21	4187
37053275180000	-78.9848	41.6013	19	13	621	16	PA	FOREST	PA21	4193
37053275190000	-78.9854	41.5993	21	15	614	20	PA	FOREST	PA21	4188
37053275290000	-78.9653	41.6057	26	19	610	27	PA	FOREST	PA21	4187
37053275350000	-78.9682	41.6088	20	14	632	17	PA	FOREST	PA21	4208
37053275370000	-78.9704	41.6096	23	17	629	23	PA	FOREST	PA21	4202
37053275400000	-78.9719	41.6109	24	18	614	24	PA	FOREST	PA21	4187
37053276120000	-79.1972	41.5958	22	16	610	22	PA	FOREST	PA21	3950
37083225290000	-78.6151	41.8821	82	99	3122	23	PA	MC KEAN	PA21	4147
37083231730000	-78.8430	41.9445	44	48	1360	26	PA	MC KEAN	PA21	3858
37083232370000	-78.5099	41.9174	49	54	1419	28	PA	MC KEAN	PA21	4001
37083275200000	-78.9170	41.9870	46	52	1544	24	PA	MC KEAN	PA21	3559
37083294410000	-78.8708	41.9739	44	45	1142	31	PA	MC KEAN	PA21	3606
37083296390000	-78.7885	41.7807	48	55	1661	23	PA	MC KEAN	PA21	4043
37083305980000	-78.8701	41.9649	40	42	1220	25	PA	MC KEAN	PA21	3708
37083312520000	-78.9265	41.6699	51	62	2078	20	PA	MC KEAN	PA21	4188
37083317440000	-78.6184	41.8720	78	96	3194	22	PA	MC KEAN	PA21	4172
37083331100000	-78.4177	41.7942	44	49	1492	23	PA	MC KEAN	PA21	4188

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37083331370000	-78.6217	41.7969	51	59	1720	24	PA	MC KEAN	PA21	4245
37083377520000	-78.9441	41.6436	21	15	632	19	PA	MC KEAN	PA21	4208
37083398850000	-78.6171	41.7996	48	56	1734	23	PA	MC KEAN	PA21	3603
37083406670000	-78.5848	41.8288	38	46	1658	18	PA	MC KEAN	PA21	4223
37083417710000	-78.5543	41.8375	44	51	1607	22	PA	MC KEAN	PA21	4133
37083470490000	-78.7108	41.7407	20	14	603	18	PA	MC KEAN	PA21	4321
37083474300000	-78.7280	41.6951	18	12	627	15	PA	MC KEAN	PA21	4354
37083475970000	-78.6862	41.8410	32	26	642	35	PA	MC KEAN	PA21	4164
37083475990000	-78.6845	41.8378	31	26	661	34	PA	MC KEAN	PA21	4195
37083476000000	-78.6835	41.8362	29	24	671	30	PA	MC KEAN	PA21	4203
37083476010000	-78.6825	41.8347	29	24	696	29	PA	MC KEAN	PA21	4212
37083476040000	-78.6886	41.8384	30	25	641	33	PA	MC KEAN	PA21	4156
37083477730000	-78.6897	41.8400	28	22	609	31	PA	MC KEAN	PA21	4121
37083477750000	-78.6828	41.8421	25	20	660	24	PA	MC KEAN	PA21	4170
37083478840000	-78.7015	41.8393	21	16	654	19	PA	MC KEAN	PA21	4165
37083478850000	-78.7002	41.8380	22	16	625	20	PA	MC KEAN	PA21	4131
37083483770000	-78.7720	41.7580	23	17	611	23	PA	MC KEAN	PA21	4280
37083483790000	-78.7718	41.7545	26	19	609	27	PA	MC KEAN	PA21	4282
37083483810000	-78.7674	41.7557	26	20	609	28	PA	MC KEAN	PA21	4255
37083483850000	-78.7691	41.7541	26	20	603	28	PA	MC KEAN	PA21	4278
37083483860000	-78.7700	41.7564	24	18	612	25	PA	MC KEAN	PA21	4283
37083484760000	-78.6576	41.8156	27	21	679	26	PA	MC KEAN	PA21	4218
37083485000000	-78.8233	41.8027	21	15	639	19	PA	MC KEAN	PA21	4182
37083485010000	-78.8253	41.8041	21	15	648	19	PA	MC KEAN	PA21	4186
37083485130000	-78.8348	41.8021	19	13	612	16	PA	MC KEAN	PA21	4148
37083486510000	-78.6619	41.8184	19	14	671	16	PA	MC KEAN	PA21	4230
37083486530000	-78.6619	41.8169	21	18	808	15	PA	MC KEAN	PA21	4218
37083486540000	-78.6639	41.8169	22	17	671	20	PA	MC KEAN	PA21	4214
37083486610000	-78.6218	41.8038	28	24	807	23	PA	MC KEAN	PA21	4247
37083486630000	-78.6256	41.8036	19	15	744	14	PA	MC KEAN	PA21	4247
37083486640000	-78.6276	41.8036	23	18	673	21	PA	MC KEAN	PA21	4243
37083487790000	-78.7310	41.8582	24	19	671	22	PA	MC KEAN	PA21	4165
37083488350000	-78.6543	41.8181	24	19	672	22	PA	MC KEAN	PA21	4186
37083488400000	-78.6696	41.8469	24	19	688	22	PA	MC KEAN	PA21	4190
37083488440000	-78.6715	41.8442	26	21	701	24	PA	MC KEAN	PA21	4208
37083488460000	-78.6675	41.8443	24	19	682	23	PA	MC KEAN	PA21	4189
37083488480000	-78.6703	41.8429	24	19	682	23	PA	MC KEAN	PA21	4193
37083488500000	-78.6733	41.8416	24	19	689	22	PA	MC KEAN	PA21	4200
37083488810000	-78.7131	41.8425	19	14	689	14	PA	MC KEAN	PA21	4192

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37083489280000	-78.6627	41.8482	21	16	685	18	PA	MC KEAN	PA21	4195
37083489290000	-78.6556	41.8487	21	16	686	18	PA	MC KEAN	PA21	4190
37083489300000	-78.6664	41.8459	26	20	672	25	PA	MC KEAN	PA21	4190
37083489320000	-78.6622	41.8467	21	16	675	18	PA	MC KEAN	PA21	4187
37083489330000	-78.6572	41.8462	24	18	637	23	PA	MC KEAN	PA21	4148
37083489340000	-78.6552	41.8472	21	16	670	18	PA	MC KEAN	PA21	4185
37083489350000	-78.6660	41.8433	26	20	651	25	PA	MC KEAN	PA21	4176
37083489360000	-78.6636	41.8445	24	18	651	23	PA	MC KEAN	PA21	4166
37083489370000	-78.6616	41.8451	21	15	643	19	PA	MC KEAN	PA21	4157
37083489380000	-78.6593	41.8458	24	19	646	24	PA	MC KEAN	PA21	4154
37083489390000	-78.6546	41.8451	21	15	608	20	PA	MC KEAN	PA21	4119
37083489400000	-78.6651	41.8419	24	18	642	23	PA	MC KEAN	PA21	4166
37083489420000	-78.6603	41.8419	22	17	686	18	PA	MC KEAN	PA21	4200
37083489430000	-78.6576	41.8425	21	16	676	18	PA	MC KEAN	PA21	4193
37083489440000	-78.6553	41.8422	21	16	670	18	PA	MC KEAN	PA21	4189
37083489450000	-78.6609	41.8435	26	20	639	26	PA	MC KEAN	PA21	4154
37083489460000	-78.6587	41.8438	26	20	640	26	PA	MC KEAN	PA21	4151
37083489470000	-78.6578	41.8479	21	16	675	18	PA	MC KEAN	PA21	4179
37083489880000	-78.8045	41.7548	21	15	600	20	PA	MC KEAN	PA21	4230
37083490720000	-78.6660	41.8488	21	16	678	18	PA	MC KEAN	PA21	4187
37083490750000	-78.6714	41.8479	24	18	628	24	PA	MC KEAN	PA21	4140
37083490760000	-78.6737	41.8467	21	15	629	19	PA	MC KEAN	PA21	4143
37083490770000	-78.6715	41.8469	21	15	643	19	PA	MC KEAN	PA21	4156
37083490780000	-78.6733	41.8454	23	18	683	20	PA	MC KEAN	PA21	4199
37083490790000	-78.6736	41.8440	23	18	692	21	PA	MC KEAN	PA21	4210
37083491960000	-78.6319	41.8359	22	17	708	19	PA	MC KEAN	PA21	4190
37083491970000	-78.6351	41.8485	21	16	672	18	PA	MC KEAN	PA21	4161
37083491980000	-78.5504	41.8328	22	17	669	20	PA	MC KEAN	PA21	4177
37083492280000	-78.5541	41.8257	25	21	792	20	PA	MC KEAN	PA21	4204
37083492290000	-78.6002	41.8506	24	20	724	21	PA	MC KEAN	PA21	4185
37083492700000	-78.6607	41.8476	24	19	671	22	PA	MC KEAN	PA21	4185
37083900480000	-78.7226	41.7677	86	100	2421	32	PA	MC KEAN	PA21	4122
37085200300000	-80.1505	41.3476	48	56	1716	23	PA	MERCER	PA21	3793
37085200310000	-80.1855	41.3441	40	48	1734	18	PA	MERCER	PA21	3783
37085200320000	-80.5151	41.2011	31	37	1539	14	PA	MERCER	PA21	3521
37085200350000	-80.5045	41.1893	52	58	1532	28	PA	MERCER	PA21	3540
37085200370000	-80.5173	41.1779	41	47	1616	20	PA	MERCER	PA21	3602
37085200380000	-80.0433	41.2661	44	52	1763	20	PA	MERCER	PA21	4019
37085200390000	-80.0728	41.2987	46	55	1846	20	PA	MERCER	PA21	4002

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37085200400000	-80.4976	41.1714	43	50	1622	21	PA	MERCER	PA21	3645
37085200630000	-80.1885	41.1813	50	60	1878	22	PA	MERCER	PA21	3990
37085201130000	-80.0207	41.2648	46	53	1649	23	PA	MERCER	PA21	4018
37085201150000	-80.0382	41.2704	46	53	1670	22	PA	MERCER	PA21	3992
37085201160000	-80.2384	41.4618	64	81	2791	20	PA	MERCER	PA21	3496
37085201250000	-80.0236	41.2694	48	57	1814	22	PA	MERCER	PA21	4033
37085201260000	-80.0389	41.2756	44	54	1875	19	PA	MERCER	PA21	4011
37085201320000	-80.4913	41.1954	45	51	1565	23	PA	MERCER	PA21	3547
37085201470000	-80.5105	41.2532	41	47	1538	21	PA	MERCER	PA21	3438
37085201790000	-80.4692	41.1727	37	45	1661	17	PA	MERCER	PA21	3656
37085201800000	-80.4758	41.1754	43	50	1675	20	PA	MERCER	PA21	3641
37085201830000	-80.4843	41.1786	39	47	1645	19	PA	MERCER	PA21	3634
37085201850000	-80.5111	41.2767	38	45	1573	19	PA	MERCER	PA21	3447
37085201860000	-80.0370	41.2807	49	53	1343	30	PA	MERCER	PA21	3988
37085201930000	-80.3672	41.3493	41	47	1590	20	PA	MERCER	PA21	3522
37085202000000	-80.1111	41.4820	47	54	1683	22	PA	MERCER	PA21	3612
37085202220000	-80.0581	41.4753	42	50	1685	20	PA	MERCER	PA21	3633
37085202230000	-80.0719	41.4346	46	54	1728	21	PA	MERCER	PA21	3696
37085202340000	-80.2331	41.4452	46	53	1655	22	PA	MERCER	PA21	3553
37085202410000	-80.5111	41.2852	44	50	1568	22	PA	MERCER	PA21	3425
37085202430000	-80.0104	41.4395	46	53	1579	24	PA	MERCER	PA21	3740
37085202470000	-80.2379	41.4679	45	52	1608	22	PA	MERCER	PA21	3481
37085202510000	-80.0814	41.4743	43	50	1689	20	PA	MERCER	PA21	3638
37085202580000	-80.1703	41.2039	42	52	1907	17	PA	MERCER	PA21	3994
37085202640000	-80.2679	41.4822	44	51	1586	22	PA	MERCER	PA21	3443
37085202650000	-80.2355	41.4628	45	52	1608	22	PA	MERCER	PA21	3492
37085202660000	-80.2227	41.4550	46	53	1629	22	PA	MERCER	PA21	3516
37085202730000	-80.2509	41.4591	46	53	1627	22	PA	MERCER	PA21	3509
37085202740000	-80.2031	41.4414	46	53	1628	22	PA	MERCER	PA21	3545
37085202750000	-80.2584	41.4808	44	51	1559	23	PA	MERCER	PA21	3421
37085202760000	-80.2542	41.4695	44	51	1585	22	PA	MERCER	PA21	3457
37085202810000	-80.1294	41.4657	43	52	1816	19	PA	MERCER	PA21	3609
37085202840000	-80.2109	41.4284	47	54	1666	23	PA	MERCER	PA21	3594
37085202850000	-80.2006	41.4265	46	53	1663	22	PA	MERCER	PA21	3607
37085202860000	-80.1915	41.4116	46	53	1637	22	PA	MERCER	PA21	3610
37085202870000	-80.2551	41.4545	46	53	1624	23	PA	MERCER	PA21	3513
37085202900000	-80.1442	41.4735	41	48	1640	20	PA	MERCER	PA21	3571
37085202910000	-80.2160	41.4469	46	53	1634	22	PA	MERCER	PA21	3537
37085202920000	-80.3066	41.4627	44	51	1574	23	PA	MERCER	PA21	3439

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37085202930000	-80.2781	41.4756	44	51	1583	22	PA	MERCER	PA21	3453
37085202940000	-80.1136	41.4533	43	50	1680	20	PA	MERCER	PA21	3652
37085202960000	-80.0727	41.4684	44	51	1631	22	PA	MERCER	PA21	3586
37085203070000	-80.2073	41.4312	46	53	1650	22	PA	MERCER	PA21	3588
37085203110000	-80.0657	41.4717	46	53	1651	22	PA	MERCER	PA21	3591
37085203120000	-80.1202	41.4649	43	50	1658	20	PA	MERCER	PA21	3618
37085203150000	-80.1105	41.4647	42	50	1672	20	PA	MERCER	PA21	3623
37085203180000	-80.0974	41.4697	43	50	1642	21	PA	MERCER	PA21	3590
37085203220000	-80.0412	41.4854	46	53	1649	23	PA	MERCER	PA21	3594
37085203230000	-80.0512	41.4719	46	53	1696	22	PA	MERCER	PA21	3649
37085203270000	-80.4896	41.2977	41	47	1564	20	PA	MERCER	PA21	3418
37085203280000	-80.0873	41.4339	46	54	1725	22	PA	MERCER	PA21	3704
37085203360000	-80.1162	41.4742	46	53	1649	23	PA	MERCER	PA21	3758
37085203380000	-80.0370	41.4709	47	54	1685	22	PA	MERCER	PA21	3650
37085203430000	-80.0226	41.4860	45	52	1604	22	PA	MERCER	PA21	3552
37085203600000	-80.0015	41.4567	43	50	1621	21	PA	MERCER	PA21	3625
37085203610000	-80.0263	41.4716	47	54	1668	23	PA	MERCER	PA21	3633
37085203620000	-80.1390	41.4601	43	51	1657	21	PA	MERCER	PA21	3598
37085203740000	-80.1355	41.2309	52	62	1914	22	PA	MERCER	PA21	3978
37085203780000	-80.1503	41.2583	52	58	1559	27	PA	MERCER	PA21	3930
37085203800000	-80.3342	41.4211	34	40	1554	16	PA	MERCER	PA21	3446
37085203810000	-80.3776	41.4394	37	42	1460	19	PA	MERCER	PA21	3325
37085203820000	-80.0972	41.4746	43	51	1679	20	PA	MERCER	PA21	3624
37085203890000	-80.2791	41.1684	50	59	1847	22	PA	MERCER	PA21	3916
37085203910000	-80.2918	41.1616	47	57	1878	20	PA	MERCER	PA21	3943
37085203920000	-80.2772	41.1447	48	58	1900	20	PA	MERCER	PA21	3965
37085203930000	-80.0448	41.4812	44	52	1698	21	PA	MERCER	PA21	3651
37085203940000	-80.0437	41.4676	43	51	1703	20	PA	MERCER	PA21	3668
37085204010000	-80.0712	41.4564	44	52	1692	21	PA	MERCER	PA21	3658
37085204030000	-80.0859	41.4512	44	52	1688	21	PA	MERCER	PA21	3654
37085204050000	-80.0062	41.4627	42	49	1610	21	PA	MERCER	PA21	3587
37085204080000	-80.5180	41.3005	43	49	1531	22	PA	MERCER	PA21	3373
37085204100000	-80.0097	41.4798	45	52	1612	22	PA	MERCER	PA21	3612
37085204150000	-80.1222	41.4791	41	48	1646	19	PA	MERCER	PA21	3589
37085204200000	-80.4647	41.3972	43	49	1520	23	PA	MERCER	PA21	3344
37085204230000	-80.0290	41.4515	47	54	1663	23	PA	MERCER	PA21	3640
37085204390000	-80.0320	41.2757	49	58	1783	23	PA	MERCER	PA21	4003
37085204450000	-80.3527	41.4579	42	47	1448	23	PA	MERCER	PA21	3308
37085204470000	-80.0133	41.4827	45	52	1628	22	PA	MERCER	PA21	3574

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37085204480000	-80.3907	41.4575	42	48	1489	22	PA	MERCER	PA21	3327
37085204520000	-80.0936	41.4779	43	50	1678	20	PA	MERCER	PA21	3625
37085204580000	-80.0124	41.2664	51	60	1819	23	PA	MERCER	PA21	4024
37085204600000	-80.3363	41.4555	40	45	1469	21	PA	MERCER	PA21	3340
37085204610000	-80.0184	41.4779	43	49	1577	21	PA	MERCER	PA21	3548
37085204640000	-80.0296	41.4822	45	51	1569	23	PA	MERCER	PA21	3529
37085204660000	-80.3344	41.4605	42	47	1466	23	PA	MERCER	PA21	3335
37085204670000	-80.3505	41.4524	39	45	1455	21	PA	MERCER	PA21	3323
37085204700000	-80.0586	41.4669	43	50	1625	21	PA	MERCER	PA21	3587
37085204720000	-80.0592	41.4805	43	50	1650	20	PA	MERCER	PA21	3605
37085204750000	-80.3485	41.4638	43	48	1445	24	PA	MERCER	PA21	3304
37085204770000	-80.3372	41.4498	44	50	1473	24	PA	MERCER	PA21	3349
37085204780000	-80.0089	41.4760	42	49	1602	21	PA	MERCER	PA21	3583
37085204790000	-80.0036	41.4108	48	57	1782	22	PA	MERCER	PA21	3813
37085204890000	-80.4652	41.2616	46	53	1643	23	PA	MERCER	PA21	3537
37085204900000	-80.4694	41.2656	46	52	1549	24	PA	MERCER	PA21	3470
37085204990000	-80.4456	41.2646	45	52	1605	22	PA	MERCER	PA21	3532
37085205030000	-80.1103	41.4489	47	54	1690	22	PA	MERCER	PA21	3655
37085205100000	-80.0350	41.4021	42	51	1763	19	PA	MERCER	PA21	3789
37085205150000	-80.4669	41.2693	44	51	1575	23	PA	MERCER	PA21	3493
37085205160000	-80.4190	41.2639	47	54	1637	23	PA	MERCER	PA21	3592
37085205190000	-80.3496	41.4786	39	44	1424	21	PA	MERCER	PA21	3268
37085205240000	-80.1125	41.4358	41	48	1681	19	PA	MERCER	PA21	3661
37085205250000	-80.3580	41.4588	39	44	1436	21	PA	MERCER	PA21	3298
37085205260000	-80.3450	41.4717	41	45	1440	22	PA	MERCER	PA21	3293
37085205270000	-80.3506	41.4699	39	44	1434	21	PA	MERCER	PA21	3286
37085205290000	-80.1663	41.3410	49	58	1795	23	PA	MERCER	PA21	3822
37085205300000	-80.3572	41.3034	47	54	1639	23	PA	MERCER	PA21	3607
37085205320000	-80.4647	41.2599	44	51	1599	22	PA	MERCER	PA21	3520
37085205340000	-80.4246	41.2560	47	54	1657	23	PA	MERCER	PA21	3611
37085205440000	-80.4919	41.4677	41	46	1420	23	PA	MERCER	PA21	3168
37085205460000	-80.5013	41.2705	46	52	1548	24	PA	MERCER	PA21	3435
37085205480000	-80.4602	41.2619	44	51	1591	22	PA	MERCER	PA21	3512
37085205490000	-80.0954	41.4608	42	50	1675	20	PA	MERCER	PA21	3638
37085205500000	-80.1474	41.4697	41	48	1635	20	PA	MERCER	PA21	3569
37085205510000	-80.3646	41.2016	51	60	1768	24	PA	MERCER	PA21	3823
37085205530000	-80.0844	41.4463	43	51	1704	20	PA	MERCER	PA21	3676
37085205540000	-80.0768	41.4572	47	54	1676	22	PA	MERCER	PA21	3644
37085205550000	-80.0895	41.4391	44	52	1712	20	PA	MERCER	PA21	3689

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37085205570000	-80.1529	41.4747	41	48	1630	19	PA	MERCER	PA21	3556
37085205580000	-80.1094	41.4587	46	54	1690	22	PA	MERCER	PA21	3643
37085205770000	-80.4161	41.2698	48	55	1603	24	PA	MERCER	PA21	3554
37085205910000	-80.3935	41.2399	49	57	1682	24	PA	MERCER	PA21	3676
37085205920000	-80.4376	41.3566	44	50	1561	22	PA	MERCER	PA21	3404
37085205940000	-80.4509	41.2690	47	53	1562	24	PA	MERCER	PA21	3491
37085206040000	-80.3822	41.1885	50	58	1724	24	PA	MERCER	PA21	3776
37085206060000	-80.0761	41.4404	47	55	1712	22	PA	MERCER	PA21	3689
37085206120000	-80.3595	41.2132	51	59	1757	24	PA	MERCER	PA21	3811
37085206130000	-80.3505	41.4838	39	44	1420	21	PA	MERCER	PA21	3291
37085206240000	-80.3592	41.2037	51	60	1765	24	PA	MERCER	PA21	3822
37085206250000	-80.3535	41.2153	51	60	1762	24	PA	MERCER	PA21	3820
37085206260000	-80.3700	41.1975	51	59	1763	24	PA	MERCER	PA21	3812
37085206280000	-80.1101	41.4288	49	57	1687	24	PA	MERCER	PA21	3676
37085206290000	-80.3770	41.2088	47	55	1738	22	PA	MERCER	PA21	3783
37085206400000	-80.3569	41.2199	51	59	1746	24	PA	MERCER	PA21	3796
37085206410000	-80.3564	41.2081	47	56	1775	22	PA	MERCER	PA21	3832
37085206450000	-80.3682	41.2060	46	54	1758	21	PA	MERCER	PA21	3808
37085206900000	-80.0699	41.4251	44	52	1705	21	PA	MERCER	PA21	3707
37085206960000	-80.2198	41.2790	48	57	1750	22	PA	MERCER	PA21	3857
37085207020000	-80.2757	41.4712	44	51	1574	23	PA	MERCER	PA21	3471
37085207260000	-80.1647	41.3489	47	55	1743	22	PA	MERCER	PA21	3799
37085207430000	-80.4468	41.2132	49	57	1676	24	PA	MERCER	PA21	3667
37085207440000	-80.4443	41.1911	48	55	1640	24	PA	MERCER	PA21	3661
37085207500000	-80.4598	41.1976	48	55	1624	24	PA	MERCER	PA21	3612
37085207530000	-80.4870	41.1744	49	56	1667	24	PA	MERCER	PA21	3652
37085207650000	-80.4255	41.2121	49	56	1682	24	PA	MERCER	PA21	3685
37085207730000	-80.4428	41.2171	49	56	1682	24	PA	MERCER	PA21	3670
37085207770000	-80.4510	41.2083	49	57	1701	24	PA	MERCER	PA21	3674
37085207830000	-80.4256	41.1932	46	53	1681	22	PA	MERCER	PA21	3721
37085207890000	-80.4575	41.3552	47	54	1578	24	PA	MERCER	PA21	3446
37085207930000	-80.4235	41.2189	46	54	1690	22	PA	MERCER	PA21	3680
37085207940000	-80.4680	41.2102	49	56	1664	24	PA	MERCER	PA21	3624
37085208000000	-80.4418	41.3652	43	49	1522	23	PA	MERCER	PA21	3398
37085208050000	-80.4370	41.1971	47	54	1684	22	PA	MERCER	PA21	3685
37085208210000	-80.4368	41.2067	50	58	1692	24	PA	MERCER	PA21	3685
37085208250000	-80.4447	41.2059	49	57	1695	24	PA	MERCER	PA21	3687
37085208370000	-80.4304	41.2064	47	54	1686	22	PA	MERCER	PA21	3688
37085208390000	-80.4685	41.2253	49	56	1654	24	PA	MERCER	PA21	3609

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37085208400000	-80.4146	41.2099	47	55	1699	22	PA	MERCER	PA21	3712
37085208440000	-80.4055	41.2124	46	54	1698	22	PA	MERCER	PA21	3717
37085208450000	-80.4113	41.2140	46	53	1690	22	PA	MERCER	PA21	3707
37085208460000	-80.4192	41.2132	47	54	1703	22	PA	MERCER	PA21	3703
37085208480000	-80.0010	41.4865	46	53	1685	22	PA	MERCER	PA21	3619
37085208570000	-80.4030	41.2176	44	52	1708	21	PA	MERCER	PA21	3714
37085208620000	-80.1598	41.3629	46	53	1686	22	PA	MERCER	PA21	3730
37085208700000	-80.4201	41.2346	44	52	1689	21	PA	MERCER	PA21	3673
37085208740000	-80.3979	41.2510	48	56	1651	24	PA	MERCER	PA21	3651
37085209180000	-80.3919	41.2238	49	57	1699	23	PA	MERCER	PA21	3710
37085209190000	-80.3957	41.2317	44	52	1700	21	PA	MERCER	PA21	3702
37085209210000	-80.4245	41.2253	43	51	1698	20	PA	MERCER	PA21	3684
37085209270000	-80.4258	41.2376	46	54	1715	22	PA	MERCER	PA21	3685
37085209310000	-80.4157	41.2271	48	55	1695	23	PA	MERCER	PA21	3683
37085209340000	-80.3766	41.2658	47	55	1655	23	PA	MERCER	PA21	3628
37085209350000	-80.3975	41.2215	46	54	1707	22	PA	MERCER	PA21	3717
37085209360000	-80.3885	41.2434	51	58	1669	25	PA	MERCER	PA21	3667
37085209480000	-80.3472	41.2495	49	57	1682	24	PA	MERCER	PA21	3738
37085209490000	-80.4110	41.2575	49	56	1648	24	PA	MERCER	PA21	3625
37085209500000	-80.4034	41.2609	53	60	1660	26	PA	MERCER	PA21	3627
37085209520000	-80.4012	41.2550	49	56	1675	24	PA	MERCER	PA21	3658
37085209530000	-80.3906	41.2604	46	53	1643	23	PA	MERCER	PA21	3624
37085209580000	-80.3499	41.2446	46	54	1693	22	PA	MERCER	PA21	3754
37085209590000	-80.3601	41.2535	49	57	1695	24	PA	MERCER	PA21	3707
37085209640000	-80.3626	41.2409	54	62	1696	27	PA	MERCER	PA21	3735
37085209650000	-80.3571	41.2437	54	62	1720	26	PA	MERCER	PA21	3747
37085209700000	-80.3892	41.2692	41	48	1624	20	PA	MERCER	PA21	3612
37085209710000	-80.4203	41.2532	46	53	1655	22	PA	MERCER	PA21	3620
37085209730000	-80.3974	41.2594	49	56	1671	24	PA	MERCER	PA21	3647
37085209750000	-80.4290	41.2419	48	56	1693	23	PA	MERCER	PA21	3656
37085209770000	-80.3876	41.2742	55	62	1615	28	PA	MERCER	PA21	3569
37085209780000	-80.3837	41.2711	49	56	1618	25	PA	MERCER	PA21	3580
37085209790000	-80.4174	41.2572	53	61	1658	27	PA	MERCER	PA21	3621
37085209810000	-80.4265	41.2335	47	54	1679	22	PA	MERCER	PA21	3666
37085209820000	-80.4099	41.2520	47	54	1673	23	PA	MERCER	PA21	3655
37085209850000	-80.4110	41.2364	54	62	1689	27	PA	MERCER	PA21	3678
37085209860000	-80.4046	41.2672	49	56	1636	24	PA	MERCER	PA21	3602
37085209890000	-80.3801	41.2349	68	84	2682	22	PA	MERCER	PA21	3728
37085210040000	-80.3606	41.2697	48	55	1686	23	PA	MERCER	PA21	3662

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37085210050000	-80.3446	41.2367	43	52	1759	20	PA	MERCER	PA21	3786
37085210060000	-80.0806	41.4287	43	51	1682	20	PA	MERCER	PA21	3698
37085210090000	-80.3514	41.2611	49	57	1716	23	PA	MERCER	PA21	3702
37085210120000	-80.3534	41.2711	48	55	1658	23	PA	MERCER	PA21	3636
37085210130000	-80.3386	41.2515	50	58	1743	24	PA	MERCER	PA21	3764
37085210140000	-80.3340	41.2604	49	57	1696	24	PA	MERCER	PA21	3722
37085210150000	-80.3289	41.2516	50	58	1737	24	PA	MERCER	PA21	3764
37085210170000	-80.3400	41.2679	48	56	1667	24	PA	MERCER	PA21	3674
37085210180000	-80.3565	41.2586	49	57	1714	24	PA	MERCER	PA21	3712
37085210190000	-80.3466	41.2656	48	56	1669	24	PA	MERCER	PA21	3666
37085210220000	-80.3187	41.2573	50	58	1750	23	PA	MERCER	PA21	3789
37085210250000	-80.3472	41.2717	48	55	1635	24	PA	MERCER	PA21	3638
37085210270000	-80.3542	41.2508	49	57	1724	23	PA	MERCER	PA21	3727
37085210280000	-80.3188	41.2513	50	58	1754	23	PA	MERCER	PA21	3789
37085210290000	-80.3341	41.2700	49	57	1695	24	PA	MERCER	PA21	3708
37085210310000	-80.3837	41.2314	49	57	1707	24	PA	MERCER	PA21	3713
37085210350000	-80.3373	41.2461	50	58	1759	23	PA	MERCER	PA21	3779
37085210380000	-80.3278	41.2624	48	56	1714	23	PA	MERCER	PA21	3735
37085210430000	-80.3281	41.2704	49	57	1703	23	PA	MERCER	PA21	3720
37085210490000	-80.2912	41.2613	49	58	1735	23	PA	MERCER	PA21	3780
37085210520000	-80.3060	41.2568	48	56	1692	23	PA	MERCER	PA21	3737
37085210530000	-80.2926	41.2553	49	57	1700	24	PA	MERCER	PA21	3766
37085210580000	-80.3057	41.2624	46	53	1654	22	PA	MERCER	PA21	3701
37085210970000	-80.0673	41.4605	47	55	1698	23	PA	MERCER	PA21	3649
37085210990000	-80.2579	41.2983	48	57	1750	22	PA	MERCER	PA21	3805
37085211040000	-80.2736	41.2801	48	57	1758	22	PA	MERCER	PA21	3818
37085211080000	-80.3006	41.2649	46	53	1654	22	PA	MERCER	PA21	3707
37085211090000	-80.2679	41.2763	49	57	1769	23	PA	MERCER	PA21	3829
37085211110000	-80.3025	41.3019	47	55	1696	23	PA	MERCER	PA21	3701
37085211230000	-80.3324	41.2654	47	55	1698	23	PA	MERCER	PA21	3710
37085211250000	-80.2846	41.2767	44	52	1730	20	PA	MERCER	PA21	3781
37085211260000	-80.3253	41.2764	47	54	1685	22	PA	MERCER	PA21	3687
37085211270000	-80.2811	41.2948	47	55	1740	22	PA	MERCER	PA21	3773
37085211280000	-80.2789	41.3027	48	56	1733	22	PA	MERCER	PA21	3738
37085211330000	-80.3248	41.2668	47	55	1704	22	PA	MERCER	PA21	3728
37085211390000	-80.3126	41.2622	48	57	1749	22	PA	MERCER	PA21	3777
37085211410000	-80.2669	41.2710	46	54	1775	21	PA	MERCER	PA21	3841
37085211440000	-80.0219	41.4817	45	52	1595	23	PA	MERCER	PA21	3556
37085211500000	-80.0825	41.4561	47	54	1684	22	PA	MERCER	PA21	3637

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37085211520000	-80.2891	41.2711	48	56	1728	22	PA	MERCER	PA21	3779
37085211560000	-80.2984	41.2545	47	54	1679	22	PA	MERCER	PA21	3738
37085211600000	-80.2647	41.2660	49	57	1780	22	PA	MERCER	PA21	3850
37085212910000	-80.3711	41.2430	63	78	2526	22	PA	MERCER	PA21	3719
37085222320000	-80.2120	41.2676	49	58	1776	23	PA	MERCER	PA21	3878
37085222350000	-80.2060	41.2687	49	58	1798	22	PA	MERCER	PA21	3887
37085222810000	-80.3324	41.2470	49	57	1774	22	PA	MERCER	PA21	3782
37085223050000	-80.1352	41.2855	50	59	1811	23	PA	MERCER	PA21	3906
37085223130000	-80.2324	41.2480	52	61	1812	24	PA	MERCER	PA21	3900
37085223190000	-80.2232	41.2843	49	58	1765	23	PA	MERCER	PA21	3841
37085223280000	-80.1943	41.2942	49	57	1770	23	PA	MERCER	PA21	3874
37085223440000	-80.1367	41.2668	51	60	1844	23	PA	MERCER	PA21	3938
37085223490000	-80.2450	41.1181	48	59	1951	20	PA	MERCER	PA21	3986
37085223510000	-80.2102	41.2857	50	59	1781	23	PA	MERCER	PA21	3868
37085223540000	-80.1965	41.3068	46	55	1767	21	PA	MERCER	PA21	3856
37085223580000	-80.3486	41.2784	46	53	1622	23	PA	MERCER	PA21	3619
37085223860000	-80.1543	41.4643	43	51	1659	21	PA	MERCER	PA21	3572
37085224010000	-80.3390	41.2223	49	58	1779	23	PA	MERCER	PA21	3814
37085224090000	-80.0727	41.3906	46	54	1754	21	PA	MERCER	PA21	3784
37085224110000	-80.1616	41.4574	46	53	1659	22	PA	MERCER	PA21	3578
37085224150000	-80.2277	41.2224	45	53	1766	20	PA	MERCER	PA21	3868
37085224490000	-80.3881	41.1323	51	60	1850	23	PA	MERCER	PA21	3869
37085224640000	-80.3069	41.2238	44	53	1790	20	PA	MERCER	PA21	3775
37085224650000	-80.3662	41.1300	52	61	1850	23	PA	MERCER	PA21	3911
37085229780000	-80.4431	41.4450	34	39	1486	17	PA	MERCER	PA21	3299
37085229800000	-80.4658	41.4413	34	39	1450	17	PA	MERCER	PA21	3251
37085230200000	-80.4689	41.4451	35	40	1445	18	PA	MERCER	PA21	3459
37085230260000	-80.4367	41.4446	33	38	1480	16	PA	MERCER	PA21	3304
37085230670000	-80.4764	41.4636	33	38	1430	17	PA	MERCER	PA21	3196
37085230700000	-80.4960	41.1753	38	46	1658	18	PA	MERCER	PA21	3643
37085231400000	-80.4923	41.1715	42	49	1651	20	PA	MERCER	PA21	3656
37085231490000	-80.4810	41.4552	36	41	1445	18	PA	MERCER	PA21	3209
37085231520000	-80.0267	41.4289	42	50	1743	19	PA	MERCER	PA21	3741
37085231640000	-80.5035	41.4603	35	40	1446	18	PA	MERCER	PA21	3188
37085231660000	-80.4442	41.4708	38	43	1431	20	PA	MERCER	PA21	3220
37085231720000	-80.4978	41.4607	36	41	1447	19	PA	MERCER	PA21	3183
37085231820000	-80.4583	41.4576	36	41	1455	19	PA	MERCER	PA21	3251
37085231830000	-80.4422	41.4309	39	45	1500	20	PA	MERCER	PA21	3330
37085231840000	-80.4934	41.4512	39	44	1449	21	PA	MERCER	PA21	3210

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37085231860000	-80.5059	41.4644	36	41	1437	19	PA	MERCER	PA21	3170
37085231900000	-80.4171	41.4289	40	46	1496	21	PA	MERCER	PA21	3340
37085231910000	-80.4225	41.4292	39	45	1514	20	PA	MERCER	PA21	3354
37085231920000	-80.4796	41.4212	38	43	1509	19	PA	MERCER	PA21	3311
37085231930000	-80.4998	41.4877	36	41	1394	19	PA	MERCER	PA21	3102
37085231950000	-80.1057	41.4805	43	51	1676	20	PA	MERCER	PA21	3615
37085232060000	-80.0057	41.4409	44	53	1759	20	PA	MERCER	PA21	3758
37085232170000	-80.0577	41.4709	45	52	1656	22	PA	MERCER	PA21	3621
37085232420000	-80.0163	41.4449	46	54	1734	21	PA	MERCER	PA21	3726
37085232430000	-80.4457	41.4496	39	44	1477	20	PA	MERCER	PA21	3287
37085232470000	-80.5181	41.4477	39	44	1450	21	PA	MERCER	PA21	3194
37085232500000	-80.0142	41.4409	44	53	1734	20	PA	MERCER	PA21	3723
37085232820000	-80.4883	41.4231	41	47	1500	21	PA	MERCER	PA21	3314
37085232830000	-80.5083	41.4479	39	45	1461	21	PA	MERCER	PA21	3213
37085232970000	-80.0377	41.4819	43	50	1625	21	PA	MERCER	PA21	3585
37085233010000	-80.4386	41.4332	36	41	1490	18	PA	MERCER	PA21	3332
37085233040000	-80.5107	41.4315	39	44	1480	20	PA	MERCER	PA21	3257
37085233200000	-80.4347	41.4302	39	45	1500	20	PA	MERCER	PA21	3340
37085233290000	-80.0793	41.4789	43	51	1681	20	PA	MERCER	PA21	3631
37085233340000	-80.5161	41.4439	39	44	1457	21	PA	MERCER	PA21	3211
37085233350000	-80.5100	41.4439	38	43	1454	20	PA	MERCER	PA21	3221
37085233370000	-80.4975	41.4424	39	44	1477	20	PA	MERCER	PA21	3250
37085233410000	-80.4412	41.4105	39	45	1495	20	PA	MERCER	PA21	3341
37085233500000	-80.4742	41.4303	39	45	1468	21	PA	MERCER	PA21	3281
37085233520000	-80.4464	41.4118	39	45	1482	21	PA	MERCER	PA21	3330
37085233610000	-80.4401	41.4591	41	46	1449	22	PA	MERCER	PA21	3267
37085233700000	-80.1097	41.4770	43	50	1675	20	PA	MERCER	PA21	3616
37085233810000	-80.4215	41.4133	39	45	1521	20	PA	MERCER	PA21	3383
37085233820000	-80.4188	41.4170	41	47	1537	21	PA	MERCER	PA21	3396
37085233920000	-80.4736	41.4206	38	44	1492	20	PA	MERCER	PA21	3300
37085233930000	-80.4761	41.4242	39	44	1489	20	PA	MERCER	PA21	3300
37121255220000	-79.5537	41.5477	40	45	1453	21	PA	VENANGO	PA21	3926
37121271870000	-79.6000	41.5630	42	46	1369	24	PA	VENANGO	PA21	3894
37121309790000	-79.9596	41.4073	49	59	1832	22	PA	VENANGO	PA21	3869
37121319050000	-79.9930	41.4804	46	54	1664	22	PA	VENANGO	PA21	3645
37121319060000	-79.9893	41.4331	49	58	1784	22	PA	VENANGO	PA21	3800
37121325270000	-79.9919	41.4860	47	55	1707	22	PA	VENANGO	PA21	3680
37121350900000	-79.5327	41.4160	54	65	2035	22	PA	VENANGO	PA21	4105
37121369540000	-79.8540	41.5004	45	53	1723	21	PA	VENANGO	PA21	3744

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37121373870000	-79.8041	41.3587	51	61	1966	21	PA	VENANGO	PA21	4053
37121382350000	-79.8574	41.5065	49	53	1371	29	PA	VENANGO	PA21	3675
37121388290000	-79.8558	41.5163	45	53	1721	21	PA	VENANGO	PA21	3727
37121388330000	-79.7992	41.5904	47	54	1678	22	PA	VENANGO	PA21	3646
37121388480000	-79.9214	41.5100	48	53	1465	26	PA	VENANGO	PA21	3745
37121388510000	-79.8507	41.5552	49	56	1667	24	PA	VENANGO	PA21	3673
37121388520000	-79.8636	41.5293	45	52	1637	22	PA	VENANGO	PA21	3650
37121390320000	-79.8580	41.5268	43	50	1642	21	PA	VENANGO	PA21	3653
37121390330000	-79.8574	41.5323	48	56	1643	24	PA	VENANGO	PA21	3646
37121390340000	-79.8697	41.5284	47	55	1728	22	PA	VENANGO	PA21	3747
37121391130000	-79.8465	41.5168	47	55	1704	22	PA	VENANGO	PA21	3742
37121391150000	-79.8392	41.5340	47	55	1734	22	PA	VENANGO	PA21	3756
37121391160000	-79.8520	41.5284	45	53	1686	21	PA	VENANGO	PA21	3694
37121392030000	-79.8646	41.5126	45	52	1650	22	PA	VENANGO	PA21	3661
37121393200000	-79.8498	41.5240	47	55	1739	22	PA	VENANGO	PA21	3741
37121398950000	-79.7838	41.5346	48	57	1751	22	PA	VENANGO	PA21	3786
37121405130000	-79.5232	41.5899	50	59	1830	22	PA	VENANGO	PA21	3837
37121406000000	-79.8600	41.5501	43	50	1633	21	PA	VENANGO	PA21	3635
37121407780000	-79.8383	41.5148	47	54	1656	23	PA	VENANGO	PA21	3681
37121407790000	-79.8399	41.5195	46	51	1445	26	PA	VENANGO	PA21	3735
37121407810000	-79.8510	41.5333	46	53	1689	22	PA	VENANGO	PA21	3688
37121407830000	-79.8399	41.5242	44	52	1714	21	PA	VENANGO	PA21	3743
37121407860000	-79.8529	41.5516	46	54	1669	22	PA	VENANGO	PA21	3684
37121407870000	-79.8434	41.5552	45	52	1649	22	PA	VENANGO	PA21	3660
37121411180000	-79.8607	41.5597	44	51	1615	22	PA	VENANGO	PA21	3610
37121411200000	-79.8454	41.5228	46	54	1723	22	PA	VENANGO	PA21	3742
37121411220000	-79.8713	41.5082	47	54	1647	23	PA	VENANGO	PA21	3674
37121412530000	-79.8560	41.5460	45	52	1640	22	PA	VENANGO	PA21	3644
37121412730000	-79.8640	41.5124	44	52	1634	22	PA	VENANGO	PA21	3662
37121412790000	-79.8331	41.5308	48	56	1719	23	PA	VENANGO	PA21	3745
37121412800000	-79.8454	41.5312	47	55	1713	22	PA	VENANGO	PA21	3752
37121412810000	-79.8236	41.5707	45	53	1721	21	PA	VENANGO	PA21	3720
37121412820000	-79.8503	41.5187	48	56	1698	23	PA	VENANGO	PA21	3762
37121412890000	-79.8531	41.5778	46	53	1645	23	PA	VENANGO	PA21	3636
37121412900000	-79.8529	41.5710	46	53	1652	22	PA	VENANGO	PA21	3649
37121412930000	-79.8251	41.5537	46	54	1734	21	PA	VENANGO	PA21	3741
37121412940000	-79.8396	41.5087	46	54	1718	22	PA	VENANGO	PA21	3744
37121413120000	-79.8655	41.5172	46	53	1653	22	PA	VENANGO	PA21	3663
37121413140000	-79.8368	41.5046	47	56	1770	22	PA	VENANGO	PA21	3799

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37121413210000	-79.7661	41.5852	47	55	1704	22	PA	VENANGO	PA21	3704
37121413220000	-79.8339	41.5257	47	55	1706	22	PA	VENANGO	PA21	3722
37121413280000	-79.8574	41.5408	46	53	1617	23	PA	VENANGO	PA21	3637
37121413320000	-79.8408	41.5288	47	55	1741	22	PA	VENANGO	PA21	3761
37121413340000	-79.8585	41.5116	46	53	1643	23	PA	VENANGO	PA21	3674
37121413600000	-79.8026	41.5895	46	53	1658	22	PA	VENANGO	PA21	3642
37121413910000	-79.8465	41.5351	46	54	1689	22	PA	VENANGO	PA21	3708
37121413950000	-79.8609	41.5649	44	51	1617	22	PA	VENANGO	PA21	3602
37121414090000	-79.8673	41.5425	44	51	1617	22	PA	VENANGO	PA21	3627
37121414450000	-79.8495	41.5526	46	53	1639	23	PA	VENANGO	PA21	3653
37121415700000	-79.8671	41.5445	44	51	1611	22	PA	VENANGO	PA21	3625
37121416750000	-79.8553	41.5638	47	54	1645	23	PA	VENANGO	PA21	3647
37121417260000	-79.7920	41.5450	44	52	1697	21	PA	VENANGO	PA21	3724
37121418000000	-79.8406	41.5685	46	54	1673	22	PA	VENANGO	PA21	3674
37121418130000	-79.8328	41.5643	43	50	1682	20	PA	VENANGO	PA21	3695
37121418150000	-79.8659	41.5714	46	53	1611	23	PA	VENANGO	PA21	3587
37121418530000	-79.8501	41.5053	47	55	1710	22	PA	VENANGO	PA21	3738
37121418790000	-79.8540	41.5098	47	54	1646	23	PA	VENANGO	PA21	3674
37121418820000	-79.8636	41.5785	42	49	1592	21	PA	VENANGO	PA21	3573
37121419980000	-79.8478	41.5631	43	51	1645	21	PA	VENANGO	PA21	3662
37121420430000	-79.8709	41.5235	46	54	1704	22	PA	VENANGO	PA21	3711
37121420490000	-79.8744	41.5002	45	52	1647	22	PA	VENANGO	PA21	3668
37121420600000	-79.7929	41.5306	39	44	1416	21	PA	VENANGO	PA21	3716
37121420610000	-79.7971	41.5380	46	54	1711	22	PA	VENANGO	PA21	3733
37121421500000	-79.8034	41.5355	44	52	1657	21	PA	VENANGO	PA21	3691
37121421510000	-79.8245	41.5423	46	54	1708	22	PA	VENANGO	PA21	3719
37121421560000	-79.7805	41.5052	48	56	1775	22	PA	VENANGO	PA21	3829
37121421570000	-79.7756	41.5238	46	54	1743	21	PA	VENANGO	PA21	3821
37121421800000	-79.7896	41.5170	47	55	1761	21	PA	VENANGO	PA21	3823
37121421820000	-79.7633	41.5304	45	53	1759	20	PA	VENANGO	PA21	3817
37121421870000	-79.7984	41.5333	44	52	1681	21	PA	VENANGO	PA21	3714
37121421930000	-79.8088	41.5400	45	53	1687	21	PA	VENANGO	PA21	3703
37121421940000	-79.8092	41.5351	45	52	1668	22	PA	VENANGO	PA21	3705
37121422040000	-79.8139	41.5435	47	54	1698	22	PA	VENANGO	PA21	3726
37121422090000	-79.7874	41.5427	46	54	1732	21	PA	VENANGO	PA21	3756
37121422770000	-79.7900	41.5372	47	55	1727	22	PA	VENANGO	PA21	3760
37121422820000	-79.7891	41.5113	47	55	1775	21	PA	VENANGO	PA21	3823
37121422830000	-79.7732	41.5341	44	52	1716	21	PA	VENANGO	PA21	3778
37121422950000	-79.7867	41.5537	46	53	1659	22	PA	VENANGO	PA21	3696

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37121423020000	-79.7834	41.5246	46	54	1711	22	PA	VENANGO	PA21	3753
37121424080000	-79.8697	41.5670	43	50	1630	21	PA	VENANGO	PA21	3615
37121424130000	-79.8274	41.5583	46	54	1707	22	PA	VENANGO	PA21	3718
37121424140000	-79.8147	41.5493	47	55	1714	22	PA	VENANGO	PA21	3724
37121424150000	-79.8405	41.5477	46	54	1677	22	PA	VENANGO	PA21	3690
37121424170000	-79.7911	41.5857	46	53	1691	22	PA	VENANGO	PA21	3687
37121424240000	-79.7836	41.5686	46	54	1697	22	PA	VENANGO	PA21	3701
37121424250000	-79.7827	41.5923	46	54	1682	22	PA	VENANGO	PA21	3671
37121426530000	-79.5958	41.6072	46	56	1868	20	PA	VENANGO	PA21	3788
37121427230000	-79.7238	41.5407	43	51	1711	20	PA	VENANGO	PA21	3846
37121427990000	-79.6680	41.5669	40	49	1791	17	PA	VENANGO	PA21	3839
37121429290000	-79.5607	41.6206	45	53	1769	20	PA	VENANGO	PA21	3749
37121429830000	-79.5524	41.6238	39	47	1760	17	PA	VENANGO	PA21	3738
37121436310000	-79.7741	41.5907	42	50	1669	20	PA	VENANGO	PA21	3236
37121436350000	-79.8594	41.4860	43	50	1689	20	PA	VENANGO	PA21	3351
37121436360000	-79.7992	41.4820	47	56	1823	21	PA	VENANGO	PA21	3409
37121436390000	-79.9527	41.4984	42	50	1712	19	PA	VENANGO	PA21	3254
37121436400000	-79.7947	41.5201	46	54	1768	21	PA	VENANGO	PA21	3354
37121436640000	-79.9703	41.4804	44	52	1709	20	PA	VENANGO	PA21	3274
37121436680000	-79.8527	41.5238	44	52	1677	21	PA	VENANGO	PA21	3301
37121436850000	-79.6791	41.5240	48	56	1723	23	PA	VENANGO	PA21	3444
37121437180000	-79.9650	41.4956	43	51	1727	20	PA	VENANGO	PA21	3247
37121437220000	-79.9756	41.4928	42	50	1730	19	PA	VENANGO	PA21	3240
37121437420000	-79.8518	41.5596	44	51	1678	21	PA	VENANGO	PA21	3239
37121437510000	-79.8060	41.5442	44	52	1706	21	PA	VENANGO	PA21	3306
37121437520000	-79.7437	41.4706	46	55	1843	20	PA	VENANGO	PA21	3914
37121437560000	-79.9453	41.5022	43	52	1741	20	PA	VENANGO	PA21	3253
37121437640000	-79.8528	41.4852	47	55	1737	22	PA	VENANGO	PA21	3358
37121437930000	-79.6137	41.5551	48	57	1859	21	PA	VENANGO	PA21	3907
37123201500000	-79.3692	41.6539	81	98	2865	25	PA	WARREN	PA21	3930
37123202570000	-79.3436	41.6716	44	54	1840	19	PA	WARREN	PA21	3410
37123202810000	-79.3736	41.6716	46	54	1783	21	PA	WARREN	PA21	3390
37123206090000	-79.0695	41.7706	74	88	2472	26	PA	WARREN	PA21	3893
37123209820000	-78.9657	41.9599	42	44	1219	27	PA	WARREN	PA21	3141
37123247040000	-79.5527	41.9206	41	45	1416	22	PA	WARREN	PA21	2624
37123269670000	-79.3904	41.9807	41	46	1472	21	PA	WARREN	PA21	2562
37123281280000	-78.9609	41.6416	22	16	637	20	PA	WARREN	PA21	3653
37123284940000	-79.6112	41.7826	43	50	1636	21	PA	WARREN	PA21	2956
37123284970000	-79.5870	41.7643	48	56	1652	24	PA	WARREN	PA21	3020

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37123284990000	-79.5682	41.7818	43	51	1651	21	PA	WARREN	PA21	2997
37123291870000	-79.5828	41.7541	44	52	1667	21	PA	WARREN	PA21	3046
37123299750000	-79.4253	41.9815	42	48	1489	22	PA	WARREN	PA21	2535
37123303380000	-79.5552	41.6747	42	50	1746	19	PA	WARREN	PA21	3190
37123306010000	-79.3458	41.9715	41	46	1450	22	PA	WARREN	PA21	2616
37123313570000	-79.5995	41.7478	57	65	1676	29	PA	WARREN	PA21	3045
37123321070000	-79.5274	41.8104	39	46	1623	18	PA	WARREN	PA21	2955
37123321340000	-79.5629	41.8246	39	45	1532	20	PA	WARREN	PA21	2884
37123322040000	-79.5480	41.8175	39	45	1565	19	PA	WARREN	PA21	2915
37123322320000	-79.5900	41.8000	39	45	1575	19	PA	WARREN	PA21	2930
37123332340000	-79.5791	41.8221	44	51	1577	22	PA	WARREN	PA21	2879
37123332350000	-79.5191	41.8011	46	53	1649	23	PA	WARREN	PA21	2985
37123332380000	-79.5717	41.7903	45	52	1596	23	PA	WARREN	PA21	2973
37123333610000	-79.5254	41.8246	45	52	1591	23	PA	WARREN	PA21	2912
37123339490000	-79.5210	41.6496	50	59	1802	23	PA	WARREN	PA21	3264
37123339500000	-79.5453	41.6902	48	56	1722	23	PA	WARREN	PA21	3169
37123339510000	-79.5638	41.7164	47	55	1702	22	PA	WARREN	PA21	3113
37123339560000	-79.3968	41.8538	43	48	1488	23	PA	WARREN	PA21	2949
37123343250000	-79.0732	41.9524	47	54	1695	22	PA	WARREN	PA21	2992
37123377340000	-79.4635	41.7021	48	55	1686	23	PA	WARREN	PA21	3262
37123377350000	-79.4691	41.6976	45	53	1757	20	PA	WARREN	PA21	3263
37123377570000	-79.5284	41.7657	45	52	1642	22	PA	WARREN	PA21	3065
37123380100000	-79.6009	41.7149	46	54	1710	22	PA	WARREN	PA21	3619
37123380390000	-79.6125	41.7528	46	53	1657	22	PA	WARREN	PA21	3024
37123380410000	-79.5992	41.7573	46	53	1650	22	PA	WARREN	PA21	3025
37123380420000	-79.6039	41.7527	46	53	1636	23	PA	WARREN	PA21	3031
37123380430000	-79.5825	41.7600	46	54	1661	22	PA	WARREN	PA21	3034
37123380890000	-79.5385	41.7586	45	52	1641	22	PA	WARREN	PA21	3066
37123381450000	-79.6044	41.7081	44	51	1683	21	PA	WARREN	PA21	3609
37123381560000	-79.5964	41.6490	44	52	1731	20	PA	WARREN	PA21	3726
37123381820000	-79.6057	41.7180	46	54	1723	22	PA	WARREN	PA21	3623
37123382230000	-79.5993	41.7221	44	52	1708	21	PA	WARREN	PA21	3605
37123383170000	-79.5479	41.6772	45	53	1754	21	PA	WARREN	PA21	3189
37123383550000	-79.5315	41.6739	48	57	1746	23	PA	WARREN	PA21	3210
37123384520000	-79.5875	41.7444	46	53	1632	22	PA	WARREN	PA21	3061
37123384610000	-79.5746	41.6426	45	53	1722	21	PA	WARREN	PA21	3692
37123384630000	-79.5462	41.7546	43	50	1639	21	PA	WARREN	PA21	3066
37123385070000	-79.6052	41.6601	43	51	1652	21	PA	WARREN	PA21	3211
37123385720000	-79.6090	41.7357	44	51	1644	21	PA	WARREN	PA21	3581

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37123385880000	-79.5653	41.6359	46	54	1761	21	PA	WARREN	PA21	3715
37123387260000	-79.5588	41.8488	40	45	1486	21	PA	WARREN	PA21	2803
37123387530000	-79.5406	41.6650	43	51	1759	19	PA	WARREN	PA21	3216
37123389010000	-79.5117	41.7198	47	55	1726	22	PA	WARREN	PA21	3159
37123389020000	-79.5518	41.8244	44	50	1561	22	PA	WARREN	PA21	2890
37123391140000	-79.5595	41.6798	47	55	1694	23	PA	WARREN	PA21	3179
37123392160000	-79.5895	41.9582	74	79	1410	46	PA	WARREN	PA21	2499
37123392200000	-79.4873	41.7441	48	56	1726	22	PA	WARREN	PA21	3150
37123392210000	-79.1104	41.6545	43	50	1649	20	PA	WARREN	PA21	3522
37123394040000	-79.6075	41.7267	47	54	1674	23	PA	WARREN	PA21	3082
37123394570000	-79.5904	41.6765	43	50	1631	21	PA	WARREN	PA21	3178
37123394610000	-79.5845	41.7355	46	52	1617	23	PA	WARREN	PA21	3078
37123395050000	-79.5960	41.7137	38	46	1721	17	PA	WARREN	PA21	3107
37123395060000	-79.4924	41.7065	48	56	1721	23	PA	WARREN	PA21	3699
37123395130000	-79.5804	41.6314	44	52	1693	21	PA	WARREN	PA21	3662
37123395650000	-79.6103	41.6710	47	55	1711	22	PA	WARREN	PA21	3666
37123395870000	-79.5026	41.7778	43	51	1664	21	PA	WARREN	PA21	3052
37123396260000	-79.5575	41.7695	42	49	1595	21	PA	WARREN	PA21	3034
37123396430000	-79.5928	41.6974	46	54	1714	22	PA	WARREN	PA21	3638
37123396450000	-79.5869	41.6662	43	51	1681	20	PA	WARREN	PA21	3197
37123396460000	-79.5946	41.6691	43	50	1641	21	PA	WARREN	PA21	3191
37123396520000	-79.5963	41.7619	46	54	1666	22	PA	WARREN	PA21	3017
37123396560000	-79.6054	41.7426	46	53	1660	22	PA	WARREN	PA21	3051
37123396570000	-79.6103	41.6657	48	56	1726	22	PA	WARREN	PA21	3682
37123396580000	-79.6038	41.6982	38	45	1655	17	PA	WARREN	PA21	3135
37123396680000	-79.5578	41.7429	43	50	1629	21	PA	WARREN	PA21	3077
37123396740000	-79.5749	41.6845	38	45	1622	18	PA	WARREN	PA21	3166
37123396780000	-79.5277	41.7409	38	45	1620	18	PA	WARREN	PA21	3106
37123397220000	-79.5468	41.7590	43	51	1656	21	PA	WARREN	PA21	3058
37123397340000	-79.5440	41.7294	42	49	1632	20	PA	WARREN	PA21	3105
37123397390000	-79.6050	41.7221	43	51	1678	20	PA	WARREN	PA21	3588
37123397440000	-79.0965	41.6299	23	17	628	22	PA	WARREN	PA21	3556
37123397480000	-79.5224	41.7451	43	50	1604	21	PA	WARREN	PA21	3107
37123397840000	-79.5974	41.7061	44	52	1714	20	PA	WARREN	PA21	3634
37123397890000	-79.5924	41.6842	38	45	1668	17	PA	WARREN	PA21	3164
37123397990000	-79.5965	41.8020	44	51	1585	22	PA	WARREN	PA21	2919
37123398220000	-79.5659	41.7664	46	53	1640	23	PA	WARREN	PA21	3034
37123398240000	-79.5662	41.7712	46	53	1646	23	PA	WARREN	PA21	3024
37123398260000	-79.5684	41.7199	38	45	1631	18	PA	WARREN	PA21	3105

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37123398580000	-79.5834	41.6404	44	53	1738	20	PA	WARREN	PA21	3250
37123398590000	-79.5901	41.7389	38	45	1667	17	PA	WARREN	PA21	3069
37123398620000	-79.5260	41.6718	43	52	1757	20	PA	WARREN	PA21	3711
37123398640000	-79.5572	41.7554	43	51	1679	20	PA	WARREN	PA21	3583
37123398650000	-79.6119	41.6985	43	51	1673	21	PA	WARREN	PA21	3132
37123398850000	-79.5903	41.6721	43	50	1631	21	PA	WARREN	PA21	3186
37123398880000	-79.5985	41.7427	38	45	1647	17	PA	WARREN	PA21	3056
37123399200000	-79.6101	41.6782	45	52	1644	22	PA	WARREN	PA21	3673
37123399230000	-79.5855	41.8258	43	49	1524	23	PA	WARREN	PA21	2862
37123399240000	-79.5603	41.6722	49	57	1768	23	PA	WARREN	PA21	3706
37123399250000	-79.5967	41.6542	48	55	1684	23	PA	WARREN	PA21	3683
37123399590000	-79.5435	41.8119	44	51	1580	22	PA	WARREN	PA21	2937
37123399860000	-79.5113	41.6641	45	53	1765	20	PA	WARREN	PA21	3727
37123400010000	-79.5932	41.7458	43	51	1678	20	PA	WARREN	PA21	3577
37123400230000	-79.5644	41.6892	38	46	1721	17	PA	WARREN	PA21	3637
37123400250000	-79.5934	41.8108	43	49	1536	22	PA	WARREN	PA21	2897
37123400270000	-79.6061	41.8059	44	50	1549	23	PA	WARREN	PA21	2900
37123400300000	-79.5701	41.7419	45	52	1616	22	PA	WARREN	PA21	3074
37123400330000	-79.5655	41.7376	45	52	1625	22	PA	WARREN	PA21	3082
37123400450000	-79.5919	41.6329	43	51	1680	20	PA	WARREN	PA21	3648
37123400770000	-79.5225	41.7379	42	49	1614	21	PA	WARREN	PA21	3117
37123400860000	-79.5605	41.7381	43	51	1648	21	PA	WARREN	PA21	3083
37123400900000	-79.5507	41.6628	46	54	1782	21	PA	WARREN	PA21	3705
37123400940000	-79.5912	41.6481	49	57	1773	22	PA	WARREN	PA21	3727
37123400970000	-79.5910	41.8257	41	46	1513	21	PA	WARREN	PA21	2857
37123401000000	-79.5862	41.6513	48	57	1752	22	PA	WARREN	PA21	3704
37123401030000	-79.5867	41.7495	46	54	1668	22	PA	WARREN	PA21	3052
37123401050000	-79.5689	41.6716	48	56	1740	22	PA	WARREN	PA21	3673
37123401110000	-79.5942	41.7508	44	51	1659	21	PA	WARREN	PA21	3043
37123401300000	-79.5957	41.6930	44	52	1696	21	PA	WARREN	PA21	3146
37123401390000	-79.5430	41.7830	46	52	1620	23	PA	WARREN	PA21	3015
37123401980000	-79.6097	41.7045	47	55	1713	22	PA	WARREN	PA21	3631
37123402690000	-79.5881	41.6428	44	53	1737	20	PA	WARREN	PA21	3707
37123402740000	-79.6013	41.6453	48	56	1743	22	PA	WARREN	PA21	3715
37123403040000	-79.5574	41.7254	43	51	1695	20	PA	WARREN	PA21	3598
37123403150000	-79.5607	41.7213	43	51	1677	20	PA	WARREN	PA21	3585
37123403160000	-79.5538	41.7213	47	55	1716	22	PA	WARREN	PA21	3631
37123403270000	-79.5991	41.8276	41	47	1540	21	PA	WARREN	PA21	2844
37123404570000	-79.6116	41.7919	45	52	1585	23	PA	WARREN	PA21	2933

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37123404620000	-79.6032	41.7678	43	51	1658	21	PA	WARREN	PA21	2998
37123404770000	-79.6099	41.8222	43	50	1550	22	PA	WARREN	PA21	2850
37123404850000	-79.6110	41.8266	43	49	1530	22	PA	WARREN	PA21	2836
37123404860000	-79.5505	41.6586	49	57	1770	23	PA	WARREN	PA21	3711
37123404890000	-79.6063	41.8267	44	51	1576	22	PA	WARREN	PA21	2840
37123405140000	-79.5809	41.7306	45	52	1622	22	PA	WARREN	PA21	3086
37123405300000	-79.5831	41.8078	44	51	1573	23	PA	WARREN	PA21	2915
37123405370000	-79.5714	41.7757	46	53	1662	22	PA	WARREN	PA21	3009
37123405470000	-79.6083	41.8304	44	51	1566	23	PA	WARREN	PA21	2827
37123405550000	-79.6109	41.8345	44	51	1575	23	PA	WARREN	PA21	2813
37123405740000	-79.6037	41.8182	43	49	1519	23	PA	WARREN	PA21	2867
37123405910000	-79.5673	41.8009	44	51	1581	22	PA	WARREN	PA21	2949
37123406490000	-79.5607	41.7876	46	52	1615	23	PA	WARREN	PA21	2990
37123406500000	-79.5650	41.7900	45	52	1596	23	PA	WARREN	PA21	2980
37123406530000	-79.5049	41.6738	49	57	1782	22	PA	WARREN	PA21	3750
37123406630000	-79.5951	41.8377	44	50	1555	22	PA	WARREN	PA21	2818
37123406980000	-79.6112	41.8180	43	49	1537	22	PA	WARREN	PA21	2861
37123407310000	-79.4745	41.8057	43	50	1656	20	PA	WARREN	PA21	2990
37123407640000	-79.5333	41.8094	43	50	1625	21	PA	WARREN	PA21	2953
37123408410000	-79.5247	41.7339	46	53	1626	22	PA	WARREN	PA21	3120
37123408610000	-79.4652	41.7453	48	56	1726	22	PA	WARREN	PA21	3697
37123408780000	-79.4859	41.8147	44	50	1543	23	PA	WARREN	PA21	2962
37123409320000	-79.5710	41.7252	46	53	1648	23	PA	WARREN	PA21	3097
37123409790000	-79.5755	41.6958	46	53	1632	22	PA	WARREN	PA21	3145
37123410250000	-79.5350	41.7087	47	55	1700	22	PA	WARREN	PA21	3625
37123410300000	-79.5034	41.6648	48	56	1738	22	PA	WARREN	PA21	3713
37123410400000	-79.4834	41.7227	47	55	1700	22	PA	WARREN	PA21	3673
37123410520000	-79.5982	41.6984	47	55	1697	23	PA	WARREN	PA21	3135
37123410560000	-79.6043	41.7037	47	54	1679	22	PA	WARREN	PA21	3124
37123410600000	-79.5571	41.7509	43	50	1676	20	PA	WARREN	PA21	3066
37123410660000	-79.5968	41.7359	43	50	1656	20	PA	WARREN	PA21	3071
37123410670000	-79.5900	41.7345	42	49	1638	20	PA	WARREN	PA21	3077
37123410680000	-79.4229	41.7577	47	55	1696	23	PA	WARREN	PA21	3183
37123411130000	-79.4792	41.7890	46	54	1664	22	PA	WARREN	PA21	3030
37123411140000	-79.4789	41.7958	43	50	1639	21	PA	WARREN	PA21	3013
37123411500000	-79.5222	41.8536	68	83	2580	23	PA	WARREN	PA21	2816
37123411520000	-79.5998	41.8748	43	49	1553	22	PA	WARREN	PA21	2702
37123411740000	-79.5295	41.7867	46	53	1645	23	PA	WARREN	PA21	3016
37123412230000	-79.5094	41.8657	42	48	1561	21	PA	WARREN	PA21	2791

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37123412490000	-79.5094	41.8511	44	51	1583	22	PA	WARREN	PA21	2839
37123412500000	-79.5169	41.8506	41	47	1590	20	PA	WARREN	PA21	2832
37123412510000	-79.4803	41.6690	44	53	1779	20	PA	WARREN	PA21	3295
37123412840000	-79.5653	41.6262	48	57	1749	22	PA	WARREN	PA21	3277
37123412900000	-79.5867	41.7308	42	49	1641	20	PA	WARREN	PA21	3084
37123413680000	-79.5260	41.8361	45	51	1552	23	PA	WARREN	PA21	2872
37123419860000	-79.1911	41.8692	43	51	1701	20	PA	WARREN	PA21	3683
37123420330000	-79.2436	41.8749	42	49	1617	21	PA	WARREN	PA21	3055
37123420460000	-79.2071	41.8685	49	57	1646	25	PA	WARREN	PA21	3130
37123420550000	-79.1900	41.8735	43	51	1685	20	PA	WARREN	PA21	3124
37123424440000	-79.1227	41.6275	23	18	678	20	PA	WARREN	PA21	3543
37123424450000	-79.1257	41.6270	22	16	670	19	PA	WARREN	PA21	3541
37123424460000	-79.1282	41.6282	25	20	670	24	PA	WARREN	PA21	3538
37123425140000	-79.1278	41.6268	27	21	632	28	PA	WARREN	PA21	3540
37123425150000	-79.1298	41.6269	27	21	634	28	PA	WARREN	PA21	3539
37123425170000	-79.1309	41.6283	29	23	607	34	PA	WARREN	PA21	3537
37123425580000	-79.1160	41.8327	28	22	610	31	PA	WARREN	PA21	3251
37123425870000	-79.1994	41.7944	28	21	611	30	PA	WARREN	PA21	3287
37123425890000	-79.1918	41.7944	26	20	611	28	PA	WARREN	PA21	3294
37123429270000	-79.2013	41.9476	39	46	1608	19	PA	WARREN	PA21	2957
37123429350000	-79.5843	41.8675	43	49	1547	22	PA	WARREN	PA21	2730
37123429930000	-79.4143	41.9593	42	47	1481	22	PA	WARREN	PA21	2616
37123429940000	-79.4297	41.9545	43	48	1505	22	PA	WARREN	PA21	2618
37123430820000	-79.6004	41.8711	39	46	1544	20	PA	WARREN	PA21	2712
37123431140000	-79.2268	41.9204	41	48	1597	20	PA	WARREN	PA21	2976
37123431330000	-79.2128	41.9313	38	45	1636	18	PA	WARREN	PA21	2983
37123433400000	-79.0461	41.6258	23	17	613	23	PA	WARREN	PA21	3594
37123433410000	-79.0442	41.6272	24	18	602	25	PA	WARREN	PA21	3594
37123433420000	-79.0461	41.6272	24	18	612	24	PA	WARREN	PA21	3593
37123433450000	-79.0442	41.6299	25	19	613	27	PA	WARREN	PA21	3591
37123433640000	-79.4198	41.9069	38	43	1457	20	PA	WARREN	PA21	2770
37123433650000	-79.4238	41.9102	36	41	1436	19	PA	WARREN	PA21	2756
37123433800000	-79.4679	41.9106	41	47	1541	21	PA	WARREN	PA21	2713
37123433810000	-79.4288	41.9222	40	45	1445	21	PA	WARREN	PA21	2716
37123434400000	-79.5113	41.6352	48	56	1787	22	PA	WARREN	PA21	3301
37123434430000	-79.5111	41.6492	46	55	1781	21	PA	WARREN	PA21	3278
37123434470000	-79.5076	41.6390	47	55	1762	21	PA	WARREN	PA21	3300
37123434490000	-79.5046	41.6349	47	56	1809	21	PA	WARREN	PA21	3311
37123434510000	-79.4266	41.8968	38	43	1458	20	PA	WARREN	PA21	2791

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37123434660000	-79.5015	41.6541	43	52	1792	19	PA	WARREN	PA21	3781
37123435110000	-79.5164	41.6382	45	53	1742	21	PA	WARREN	PA21	3289
37023000020000	-78.1902	41.3375	52	61	1794	24	PA	CAMERON	PA22	5563
37023000210000	-78.1951	41.3251	51	60	1872	22	PA	CAMERON	PA22	5657
37023000220000	-78.1843	41.3302	35	35	1036	25	PA	CAMERON	PA22	5567
37023200050000	-77.9957	41.3651	59	70	2014	25	PA	CAMERON	PA22	6256
37023200090000	-78.2730	41.4372	61	72	2056	25	PA	CAMERON	PA22	5364
37023200170000	-78.2990	41.4247	59	69	1981	25	PA	CAMERON	PA22	5375
37023200200000	-78.1527	41.5170	62	73	2058	26	PA	CAMERON	PA22	5308
37023200290000	-78.2352	41.4974	67	78	1991	29	PA	CAMERON	PA22	5362
37023200300000	-78.1803	41.4340	58	67	1823	27	PA	CAMERON	PA22	5433
37023200370000	-78.1396	41.5567	58	70	2107	23	PA	CAMERON	PA22	5339
37023200420000	-78.2376	41.5853	51	61	1938	21	PA	CAMERON	PA22	5242
37023200440000	-78.1662	41.5512	48	58	1991	19	PA	CAMERON	PA22	5326
37023200460000	-78.1809	41.5818	49	60	1958	21	PA	CAMERON	PA22	5333
37023200470000	-78.3258	41.5548	43	52	1822	19	PA	CAMERON	PA22	5123
37023200490000	-78.2311	41.4782	57	69	2085	23	PA	CAMERON	PA22	5366
37023200500000	-78.1857	41.5297	50	61	2024	20	PA	CAMERON	PA22	5330
37023200540000	-78.1052	41.4320	43	54	1989	17	PA	CAMERON	PA22	5889
37023200580000	-78.2268	41.4839	54	66	2132	21	PA	CAMERON	PA22	5364
37023200600000	-78.0939	41.4885	52	64	2105	21	PA	CAMERON	PA22	5887
37023200620000	-78.0919	41.4391	56	67	2014	23	PA	CAMERON	PA22	5907
37023200630000	-78.3459	41.5836	30	25	661	32	PA	CAMERON	PA22	5136
37023200670000	-78.1139	41.4034	48	60	2185	18	PA	CAMERON	PA22	5920
37023200680000	-78.2398	41.4743	52	64	2095	21	PA	CAMERON	PA22	5337
37023200690000	-78.0926	41.5126	57	68	2070	23	PA	CAMERON	PA22	5761
37023200700000	-78.2666	41.4468	52	64	2075	21	PA	CAMERON	PA22	5301
37023200940000	-78.2859	41.4932	30	29	983	21	PA	CAMERON	PA22	5089
37023900060000	-78.1947	41.2434	76	89	2315	29	PA	CAMERON	PA22	6291
37023900240000	-78.1374	41.3374	51	60	1793	23	PA	CAMERON	PA22	5611
37023900300000	-78.1891	41.3334	48	56	1791	22	PA	CAMERON	PA22	5587
37035200270000	-77.8729	41.4264	46	53	1662	22	PA	CLINTON	PA22	6182
37035200390000	-77.6903	41.1809	54	69	2581	18	PA	CLINTON	PA22	6819
37035200780000	-77.8729	41.4233	57	67	1961	24	PA	CLINTON	PA22	6259
37035200800000	-77.7359	41.4754	54	66	2076	22	PA	CLINTON	PA22	6299
37035200810000	-77.7430	41.4650	97	108	2071	42	PA	CLINTON	PA22	6291
37035200820000	-77.7508	41.4665	52	63	2042	21	PA	CLINTON	PA22	6265
37035200850000	-77.8479	41.4404	48	58	1964	20	PA	CLINTON	PA22	6247
37035200920000	-77.8401	41.4475	48	58	1921	20	PA	CLINTON	PA22	6186

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37035200970000	-77.8139	41.4578	51	61	1965	21	PA	CLINTON	PA22	6283
37035200990000	-77.8104	41.4627	48	58	1932	20	PA	CLINTON	PA22	6221
37035201050000	-77.7666	41.4556	51	62	2088	20	PA	CLINTON	PA22	6280
37035201060000	-77.7597	41.4624	48	59	2053	19	PA	CLINTON	PA22	6269
37035201080000	-77.8190	41.4556	49	59	1966	20	PA	CLINTON	PA22	6268
37035201140000	-77.8917	41.4227	48	59	1978	20	PA	CLINTON	PA22	6227
37035201160000	-77.8339	41.4546	48	58	1992	19	PA	CLINTON	PA22	6241
37035201170000	-77.8499	41.4051	51	63	2218	19	PA	CLINTON	PA22	6022
37035201200000	-77.8092	41.4679	46	57	1996	19	PA	CLINTON	PA22	6230
37035201240000	-77.8004	41.4728	46	57	2008	18	PA	CLINTON	PA22	6242
37035201260000	-77.8461	41.4108	53	65	2099	21	PA	CLINTON	PA22	6300
37035201290000	-77.8501	41.4468	47	58	2034	19	PA	CLINTON	PA22	6258
37035201320000	-77.8391	41.4136	52	64	2141	20	PA	CLINTON	PA22	6310
37035201360000	-77.8361	41.4153	53	64	2049	22	PA	CLINTON	PA22	6258
37035201780000	-77.9440	41.3585	47	60	2281	17	PA	CLINTON	PA22	6383
37035201870000	-77.8859	41.4240	68	79	1967	30	PA	CLINTON	PA22	6241
37035201980000	-77.8476	41.4371	49	60	2013	20	PA	CLINTON	PA22	6300
37035202760000	-77.5666	41.3713	177	186	5901	28	PA	CLINTON	PA22	6825
37035203750000	-77.6026	41.3552	82	101	4107	18	PA	CLINTON	PA22	6806
37035204360000	-77.6469	41.2808	35	39	1340	19	PA	CLINTON	PA22	6837
37035204390000	-77.7488	41.4694	60	71	2060	25	PA	CLINTON	PA22	6255
37035204410000	-77.7465	41.4750	60	71	2047	25	PA	CLINTON	PA22	6245
37035205060000	-77.6510	41.2579	28	33	1430	14	PA	CLINTON	PA22	6729
37035205130000	-77.7399	41.1403	38	43	1471	20	PA	CLINTON	PA22	6766
37035206130000	-77.6636	41.2498	29	34	1433	14	PA	CLINTON	PA22	6751
37035206410000	-77.7225	41.2654	31	34	1303	17	PA	CLINTON	PA22	6792
37035206730000	-77.6794	41.2456	52	56	1382	31	PA	CLINTON	PA22	6744
37035206930000	-77.4366	41.2405	41	50	1894	17	PA	CLINTON	PA22	6808
37035207060000	-77.7415	41.3087	34	40	1527	16	PA	CLINTON	PA22	6416
37035207380000	-77.7042	41.2245	28	33	1453	13	PA	CLINTON	PA22	6790
37035207410000	-77.6944	41.2283	34	39	1448	18	PA	CLINTON	PA22	6787
37035207750000	-77.7453	41.1337	29	34	1447	14	PA	CLINTON	PA22	6681
37035207760000	-77.7455	41.1292	29	34	1419	14	PA	CLINTON	PA22	6817
37035208510000	-77.6947	41.1687	61	77	2663	20	PA	CLINTON	PA22	6849
37035208520000	-77.8135	41.4191	58	71	2211	22	PA	CLINTON	PA22	6297
37035209160000	-77.7177	41.2581	51	65	2420	17	PA	CLINTON	PA22	6830
37081200030000	-77.1867	41.4220	59	71	2203	23	PA	LYCOMING	PA22	6718
37081200040000	-77.5663	41.4710	61	75	2407	22	PA	LYCOMING	PA22	6423
37081200060000	-76.7034	41.3366	24	21	824	18	PA	LYCOMING	PA22	7048

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37081200070000	-77.2057	41.2893	59	69	1924	26	PA	LYCOMING	PA22	6490
37081200190000	-76.6476	41.2933	53	67	2388	19	PA	LYCOMING	PA22	7051
37081200200000	-77.2131	41.2862	57	68	1969	24	PA	LYCOMING	PA22	6481
37081200210000	-77.2025	41.2938	45	55	1881	19	PA	LYCOMING	PA22	6486
37081200250000	-77.2795	41.2633	54	67	2214	21	PA	LYCOMING	PA22	6600
37081200260000	-77.1803	41.2993	59	70	2109	24	PA	LYCOMING	PA22	6663
37081200280000	-77.5888	41.5000	88	107	3918	20	PA	LYCOMING	PA22	6345
37081200290000	-77.5222	41.3806	84	103	4113	18	PA	LYCOMING	PA22	6773
37081200320000	-77.3861	41.2799	37	47	1886	15	PA	LYCOMING	PA22	6840
37081200370000	-76.7968	41.3613	49	60	1935	21	PA	LYCOMING	PA22	7303
37081200380000	-76.8969	41.3806	51	61	1935	22	PA	LYCOMING	PA22	7066
37081200390000	-76.8000	41.3436	49	60	1935	21	PA	LYCOMING	PA22	7266
37081200400000	-76.7396	41.3415	49	59	1830	22	PA	LYCOMING	PA22	7233
37081200410000	-77.2783	41.3454	37	48	1990	14	PA	LYCOMING	PA22	6770
37081200420000	-77.2349	41.3763	32	41	1826	13	PA	LYCOMING	PA22	6827
37081200430000	-77.4051	41.3270	39	49	1987	15	PA	LYCOMING	PA22	6734
37081900000000	-76.8894	41.4292	81	94	2236	32	PA	LYCOMING	PA22	6729
37081900030000	-77.2880	41.5402	56	66	2023	23	PA	LYCOMING	PA22	6704
37105002780000	-77.6949	41.9766	42	49	1567	21	PA	POTTER	PA22	2010
37105002790000	-77.6950	41.9746	42	48	1589	21	PA	POTTER	PA22	2281
37105002830000	-77.7266	41.9677	42	49	1609	21	PA	POTTER	PA22	2811
37105004100000	-77.9662	41.5131	45	55	1923	19	PA	POTTER	PA22	5911
37105004460000	-77.9967	41.5045	36	45	1866	14	PA	POTTER	PA22	5889
37105008910000	-78.0314	41.4814	34	41	1592	16	PA	POTTER	PA22	5939
37105200390000	-77.6938	41.4934	51	62	2056	20	PA	POTTER	PA22	6354
37105200500000	-77.6506	41.5238	49	60	2045	20	PA	POTTER	PA22	6313
37105201480000	-77.8052	41.8619	53	59	1584	28	PA	POTTER	PA22	5504
37105201490000	-78.0415	41.5847	61	71	1893	28	PA	POTTER	PA22	5225
37105201530000	-77.7786	41.8774	47	54	1618	24	PA	POTTER	PA22	5609
37105201540000	-77.8147	41.8675	54	62	1637	28	PA	POTTER	PA22	5495
37105201550000	-77.8328	41.8569	47	54	1622	23	PA	POTTER	PA22	5594
37105201560000	-77.7815	41.8855	55	63	1684	27	PA	POTTER	PA22	5410
37105201580000	-77.8249	41.8661	55	62	1644	28	PA	POTTER	PA22	5563
37105201820000	-77.7745	41.4893	116	127	5731	19	PA	POTTER	PA22	6277
37105201830000	-77.9905	41.5029	42	52	1869	18	PA	POTTER	PA22	5900
37105201940000	-77.9954	41.5013	52	61	1870	23	PA	POTTER	PA22	5903
37105201960000	-78.0023	41.4935	42	51	1876	17	PA	POTTER	PA22	5910
37105202100000	-78.0082	41.4964	50	60	1911	21	PA	POTTER	PA22	5917
37105202110000	-78.0150	41.4898	56	66	1855	25	PA	POTTER	PA22	5871

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37105202120000	-78.0186	41.4937	54	64	1841	25	PA	POTTER	PA22	5846
37105202140000	-78.0033	41.5078	47	56	1839	20	PA	POTTER	PA22	5837
37105202150000	-78.0027	41.5124	57	66	1836	26	PA	POTTER	PA22	5804
37105202160000	-77.9948	41.5092	52	61	1820	24	PA	POTTER	PA22	5827
37105202180000	-77.9905	41.5126	58	67	1865	26	PA	POTTER	PA22	5859
37105202210000	-77.9885	41.5193	50	59	1845	22	PA	POTTER	PA22	5801
37105202230000	-77.9700	41.5087	45	55	1941	19	PA	POTTER	PA22	5935
37105202290000	-78.0146	41.5020	46	55	1802	20	PA	POTTER	PA22	5832
37105202690000	-77.7303	41.6700	52	62	1924	22	PA	POTTER	PA22	5826
37105202850000	-77.9743	41.5069	43	53	1884	18	PA	POTTER	PA22	5896
37105202860000	-78.0261	41.5058	59	68	1857	27	PA	POTTER	PA22	5787
37105202870000	-78.0083	41.5154	46	55	1786	21	PA	POTTER	PA22	5723
37105202880000	-78.0201	41.4866	59	69	1862	27	PA	POTTER	PA22	5857
37105202900000	-78.0298	41.4962	43	52	1854	18	PA	POTTER	PA22	5809
37105202920000	-78.0144	41.5117	41	51	1841	18	PA	POTTER	PA22	5780
37105202960000	-77.9145	41.9222	48	55	1631	24	PA	POTTER	PA22	1791
37105202970000	-77.9095	41.9174	58	68	1864	26	PA	POTTER	PA22	2133
37105202990000	-77.8801	41.9173	46	53	1613	23	PA	POTTER	PA22	2126
37105203020000	-77.8005	41.9509	40	46	1572	20	PA	POTTER	PA22	3740
37105203030000	-77.9095	41.9116	46	52	1565	24	PA	POTTER	PA22	2591
37105203040000	-77.9339	41.9003	41	48	1637	20	PA	POTTER	PA22	3902
37105203050000	-77.9028	41.9229	44	50	1583	22	PA	POTTER	PA22	1558
37105203140000	-78.1326	41.5789	53	63	2003	22	PA	POTTER	PA22	5501
37105203150000	-77.8717	41.9217	49	56	1631	24	PA	POTTER	PA22	1679
37105203160000	-77.9203	41.9142	41	48	1625	19	PA	POTTER	PA22	2573
37105203170000	-77.9015	41.9284	45	52	1594	23	PA	POTTER	PA22	1163
37105203260000	-77.9031	41.9134	43	50	1569	22	PA	POTTER	PA22	2400
37105203270000	-77.9308	41.8964	44	51	1655	21	PA	POTTER	PA22	4189
37105203290000	-77.7178	41.4863	51	62	2051	21	PA	POTTER	PA22	6313
37105203300000	-77.7251	41.4850	52	63	2010	22	PA	POTTER	PA22	6264
37105203310000	-77.7057	41.4934	54	66	2089	22	PA	POTTER	PA22	6381
37105203320000	-77.7119	41.4916	54	66	2097	22	PA	POTTER	PA22	6394
37105203330000	-77.6809	41.5192	51	63	2198	19	PA	POTTER	PA22	6319
37105203340000	-77.7321	41.4874	53	65	2092	21	PA	POTTER	PA22	6324
37105203360000	-77.7022	41.5026	54	65	2034	22	PA	POTTER	PA22	6336
37105203390000	-77.9289	41.9023	48	55	1609	24	PA	POTTER	PA22	3700
37105203420000	-77.8635	41.9238	44	51	1607	22	PA	POTTER	PA22	1401
37105203440000	-77.9101	41.9075	47	53	1608	23	PA	POTTER	PA22	3017
37105203480000	-77.9155	41.9116	44	51	1592	22	PA	POTTER	PA22	2702

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37105203490000	-77.8264	41.9350	46	53	1611	23	PA	POTTER	PA22	1273
37105203510000	-77.7820	41.9595	48	55	1622	24	PA	POTTER	PA22	3585
37105203560000	-77.9310	41.9106	50	57	1656	25	PA	POTTER	PA22	2941
37105203570000	-77.8055	41.9476	49	56	1552	26	PA	POTTER	PA22	3254
37105203600000	-77.9378	41.8946	48	56	1654	24	PA	POTTER	PA22	4352
37105203610000	-77.9431	41.8970	48	55	1667	23	PA	POTTER	PA22	4149
37105203630000	-77.8851	41.9273	43	50	1565	22	PA	POTTER	PA22	1196
37105203660000	-77.9002	41.9183	44	51	1554	23	PA	POTTER	PA22	1923
37105203770000	-77.7742	41.4843	48	58	1922	20	PA	POTTER	PA22	6250
37105203830000	-77.6782	41.5129	51	63	2088	20	PA	POTTER	PA22	6361
37105203880000	-77.7637	41.4981	47	57	1974	19	PA	POTTER	PA22	6249
37105204100000	-77.7544	41.5032	61	71	1950	27	PA	POTTER	PA22	6254
37105204110000	-77.7926	41.4809	47	58	1986	19	PA	POTTER	PA22	6234
37105204130000	-77.8494	41.5736	57	67	1920	25	PA	POTTER	PA22	5877
37105204280000	-77.7080	41.9711	47	55	1740	22	PA	POTTER	PA22	2609
37105204360000	-78.1481	41.7020	50	59	1870	22	PA	POTTER	PA22	5402
37105204370000	-78.0077	41.6133	52	64	2083	21	PA	POTTER	PA22	5469
37105204380000	-77.6581	41.5500	57	68	2052	23	PA	POTTER	PA22	6345
37105204470000	-78.1788	41.7453	53	63	1876	24	PA	POTTER	PA22	5007
37105204540000	-77.6599	41.9846	43	50	1622	21	PA	POTTER	PA22	1212
37105204580000	-77.8142	41.6428	56	68	2105	22	PA	POTTER	PA22	5968
37105204590000	-78.0414	41.4906	50	57	1700	24	PA	POTTER	PA22	5641
37105204670000	-78.1899	41.6437	58	72	2355	21	PA	POTTER	PA22	5335
37105204680000	-77.9174	41.6196	50	63	2225	18	PA	POTTER	PA22	5863
37105204730000	-77.7209	41.5056	55	67	2131	22	PA	POTTER	PA22	6294
37105204740000	-77.7330	41.5343	57	69	2198	22	PA	POTTER	PA22	6310
37105205520000	-77.9424	41.8728	49	57	1731	23	PA	POTTER	PA22	5196
37105205550000	-77.7713	41.4815	50	60	1902	22	PA	POTTER	PA22	6240
37105205560000	-77.7595	41.4888	52	62	1995	21	PA	POTTER	PA22	6252
37105205690000	-77.8137	41.8467	43	49	1530	22	PA	POTTER	PA22	5451
37105206880000	-78.0176	41.6864	51	59	1741	24	PA	POTTER	PA22	5476
37105207220000	-77.8917	41.9132	44	51	1597	22	PA	POTTER	PA22	2542
37105207410000	-77.7870	41.6055	46	56	1895	20	PA	POTTER	PA22	5846
37105208480000	-78.0565	41.7779	30	27	853	24	PA	POTTER	PA22	5256
37105209610000	-78.1444	41.7011	20	15	679	17	PA	POTTER	PA22	5416
37105209620000	-78.1418	41.7060	18	12	648	14	PA	POTTER	PA22	5366
37105209660000	-77.6737	41.5466	52	63	2124	20	PA	POTTER	PA22	6383
37105209910000	-77.6803	41.5170	51	62	2097	20	PA	POTTER	PA22	6328
37105209920000	-77.7054	41.5056	52	64	2135	20	PA	POTTER	PA22	6353

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37105209930000	-77.6993	41.5086	50	62	2100	20	PA	POTTER	PA22	6322
37105210000000	-77.7326	41.4876	41	48	1570	20	PA	POTTER	PA22	6318
37105210350000	-77.7291	41.4832	40	44	1392	22	PA	POTTER	PA22	6301
37105210360000	-77.7313	41.4779	54	65	2043	22	PA	POTTER	PA22	6282
37105210380000	-77.7187	41.4915	60	71	2031	25	PA	POTTER	PA22	6300
37105210390000	-77.7056	41.5018	60	71	2031	25	PA	POTTER	PA22	6319
37105210400000	-77.6823	41.5142	56	67	2065	23	PA	POTTER	PA22	6033
37105210410000	-77.6727	41.5208	56	67	2065	23	PA	POTTER	PA22	6317
37105210420000	-77.7127	41.4968	60	71	2050	25	PA	POTTER	PA22	6348
37105210430000	-77.6963	41.5034	56	66	1997	23	PA	POTTER	PA22	6308
37105210470000	-77.8361	41.5954	24	20	765	19	PA	POTTER	PA22	5872
37105210610000	-78.0373	41.8449	63	71	1660	33	PA	POTTER	PA22	4839
37105210900000	-77.8873	41.7892	57	66	1875	25	PA	POTTER	PA22	5527
37105210920000	-77.9087	41.7906	38	45	1692	17	PA	POTTER	PA22	5390
37105211000000	-77.8537	41.8090	47	55	1752	21	PA	POTTER	PA22	5504
37105211010000	-77.8380	41.8211	47	53	1534	25	PA	POTTER	PA22	5457
37113900000000	-76.5158	41.3521	72	91	3753	17	PA	SULLIVAN	PA22	7195
37113900010000	-76.5507	41.5351	61	73	2192	24	PA	SULLIVAN	PA22	6795
37117000080000	-77.5073	41.8773	39	44	1423	21	PA	TIOGA	PA22	5644
37117000120000	-77.5560	41.8564	39	44	1477	20	PA	TIOGA	PA22	5799
37117001150000	-77.1272	41.9562	27	23	741	25	PA	TIOGA	PA22	4107
37117001220000	-77.1908	41.9471	31	33	1176	19	PA	TIOGA	PA22	4991
37117200560000	-77.2986	41.6293	81	98	3139	23	PA	TIOGA	PA22	6203
37117200570000	-77.5470	41.6894	99	117	4571	20	PA	TIOGA	PA22	6130
37117200600000	-77.4482	41.6168	69	81	2229	27	PA	TIOGA	PA22	6390
37117201050000	-77.3087	41.6625	49	59	1967	20	PA	TIOGA	PA22	6178
37117201340000	-77.3596	41.6492	62	74	2190	24	PA	TIOGA	PA22	6301
37117201350000	-77.5585	41.5784	49	58	1879	21	PA	TIOGA	PA22	6309
37117201400000	-77.5284	41.7786	67	82	2601	22	PA	TIOGA	PA22	5966
37117201490000	-77.4949	41.8972	41	47	1534	21	PA	TIOGA	PA22	5682
37117201590000	-76.9913	41.7753	46	54	1721	21	PA	TIOGA	PA22	6189
37117201600000	-76.9583	41.7696	44	56	2146	17	PA	TIOGA	PA22	6263
37117201620000	-77.1478	41.7108	55	68	2331	20	PA	TIOGA	PA22	6398
37117201650000	-77.2396	41.8984	45	53	1771	20	PA	TIOGA	PA22	5955
37117201680000	-77.2364	41.9396	56	65	1825	26	PA	TIOGA	PA22	5621
37105000130000	-78.1028	41.9765	42	48	1586	21	PA	POTTER	PA22	4406
37105000140000	-78.0925	41.9809	40	45	1490	21	PA	POTTER	PA22	4311
37105000160000	-78.1021	41.9724	41	47	1535	21	PA	POTTER	PA22	4380
37105000170000	-78.0879	41.9838	39	45	1478	21	PA	POTTER	PA22	4295

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37105000180000	-78.1087	41.9734	39	45	1512	20	PA	POTTER	PA22	4351
37105000200000	-78.1059	41.9719	41	46	1495	21	PA	POTTER	PA22	4351
37015200010000	-76.3059	41.5806	99	118	3915	23	PA	BRADFORD	PA23	6740
37015200020000	-76.3259	41.7837	43	53	2003	17	PA	BRADFORD	PA23	6205
37015200090000	-76.3429	41.6991	59	72	2286	22	PA	BRADFORD	PA23	6578
37015200280000	-76.7774	41.9014	41	49	1801	18	PA	BRADFORD	PA23	6407
37015200570000	-76.6391	41.9634	53	67	2429	18	PA	BRADFORD	PA23	3489
37115200060000	-75.6978	41.7777	60	75	2591	20	PA	SUSQUEHANNA	PA23	6241
37103200030000	-75.1416	41.4165	104	123	4240	22	PA	PIKE	PA23	6315
37069200110000	-75.5609	41.6125	22	20	910	15	PA	LACKAWANNA	PA24	6720
37069202170000	-75.7806	41.4310	28	32	1357	14	PA	LACKAWANNA	PA24	7010
37025200020000	-75.6243	40.8559	36	41	1487	18	PA	CARBON	PA24	10543
37097200020000	-76.6743	40.8574	76	94	4491	15	PA	NORTHUMBERLAND	PA24	6604
37003206520000	-79.7999	40.5978	32	30	956	24	PA	ALLEGHENY	PA17	5618
37003209510000	-79.7967	40.5343	28	26	882	21	PA	ALLEGHENY	PA17	5468
37003209730000	-79.8362	40.5433	33	32	975	25	PA	ALLEGHENY	PA17	5429
37003211550000	-80.2493	40.4029	25	20	732	22	PA	ALLEGHENY	PA17	5196
37003212950000	-79.7497	40.5340	33	35	1255	19	PA	ALLEGHENY	PA17	5596
37003213850000	-79.7366	40.5390	25	25	1008	16	PA	ALLEGHENY	PA17	5546
37003213910000	-79.7344	40.5464	33	33	1019	24	PA	ALLEGHENY	PA17	5471
37003214440000	-79.8104	40.5167	29	29	1088	18	PA	ALLEGHENY	PA17	5488
37003214510000	-79.8282	40.5126	32	31	977	23	PA	ALLEGHENY	PA17	5470
37003214520000	-79.8238	40.5140	33	32	1012	23	PA	ALLEGHENY	PA17	5495
37003214550000	-79.8197	40.5260	34	34	1024	24	PA	ALLEGHENY	PA17	5496
37003214870000	-79.8046	40.4931	30	33	1250	17	PA	ALLEGHENY	PA17	5759
37003214920000	-79.8061	40.5298	30	30	1067	20	PA	ALLEGHENY	PA17	5552
37003214930000	-79.8102	40.5345	28	29	1059	18	PA	ALLEGHENY	PA17	5526
37003214950000	-79.8161	40.5290	28	28	1038	19	PA	ALLEGHENY	PA17	5500
37003214960000	-79.8172	40.5329	31	31	1041	21	PA	ALLEGHENY	PA17	5502
37003214970000	-79.7983	40.5006	32	33	1094	21	PA	ALLEGHENY	PA17	5681
37003215060000	-79.7952	40.5049	29	30	1070	19	PA	ALLEGHENY	PA17	5628
37003215070000	-79.7999	40.5041	31	32	1118	19	PA	ALLEGHENY	PA17	5678
37003215080000	-79.8272	40.5013	31	32	1126	19	PA	ALLEGHENY	PA17	5621
37003215100000	-79.8043	40.5094	29	30	1101	19	PA	ALLEGHENY	PA17	5605
37003215140000	-79.8208	40.5403	32	32	1069	21	PA	ALLEGHENY	PA17	5431
37003215190000	-79.8237	40.5074	28	29	1098	18	PA	ALLEGHENY	PA17	5589
37003215200000	-79.8159	40.5056	27	28	1114	16	PA	ALLEGHENY	PA17	5591
37003215210000	-79.8093	40.5090	27	28	1114	16	PA	ALLEGHENY	PA17	5640
37003215360000	-79.8179	40.5083	32	31	1027	22	PA	ALLEGHENY	PA17	5545

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37003215410000	-79.8500	40.4713	30	31	1114	19	PA	ALLEGHENY	PA17	5637
37003215450000	-79.8548	40.4717	28	29	1125	16	PA	ALLEGHENY	PA17	5639
37003215480000	-79.8474	40.4911	30	29	974	22	PA	ALLEGHENY	PA17	5494
37003215510000	-79.8011	40.4938	31	32	1176	18	PA	ALLEGHENY	PA17	5719
37003215610000	-79.7994	40.4879	38	39	1101	26	PA	ALLEGHENY	PA17	5810
37003215620000	-79.8462	40.4784	28	28	1022	19	PA	ALLEGHENY	PA17	5537
37003215640000	-79.8193	40.5143	28	29	1108	17	PA	ALLEGHENY	PA17	5497
37003215670000	-79.7967	40.4973	27	27	1058	17	PA	ALLEGHENY	PA17	5678
37003215730000	-79.8072	40.4982	30	31	1113	19	PA	ALLEGHENY	PA17	5699
37003215860000	-79.7917	40.5545	29	29	1032	19	PA	ALLEGHENY	PA17	5585
37003215900000	-79.8436	40.4906	29	29	1042	19	PA	ALLEGHENY	PA17	5540
37003215910000	-79.8410	40.4933	29	29	1040	19	PA	ALLEGHENY	PA17	5543
37003216210000	-79.7435	40.6208	27	27	1056	17	PA	ALLEGHENY	PA17	5506
37005012660000	-79.3995	40.8637	21	17	741	16	PA	ARMSTRONG	PA17	4840
37005012760000	-79.3859	40.7689	30	30	1065	20	PA	ARMSTRONG	PA17	5578
37005018690000	-79.4364	40.8483	33	34	1076	23	PA	ARMSTRONG	PA17	4945
37005200340000	-79.4871	40.7441	29	29	1036	20	PA	ARMSTRONG	PA17	5424
37005201550000	-79.3620	40.7693	31	30	1004	21	PA	ARMSTRONG	PA17	5620
37005201650000	-79.3640	40.7429	34	35	1079	24	PA	ARMSTRONG	PA17	5593
37005202620000	-79.3712	40.7478	37	37	1058	26	PA	ARMSTRONG	PA17	5605
37005202720000	-79.3663	40.7642	36	36	1052	25	PA	ARMSTRONG	PA17	5628
37005202770000	-79.3673	40.7528	37	38	1104	26	PA	ARMSTRONG	PA17	5656
37005202910000	-79.4412	40.8377	30	31	1100	19	PA	ARMSTRONG	PA17	5057
37005203670000	-79.5638	40.6783	22	22	994	13	PA	ARMSTRONG	PA17	5594
37005204090000	-79.4115	40.7510	30	30	1029	20	PA	ARMSTRONG	PA17	5359
37005204140000	-79.3956	40.8251	25	24	952	17	PA	ARMSTRONG	PA17	5178
37005204390000	-79.4053	40.7532	33	34	1069	23	PA	ARMSTRONG	PA17	5426
37005204400000	-79.4091	40.7545	31	30	1020	21	PA	ARMSTRONG	PA17	5339
37005204410000	-79.5799	40.6244	23	23	1042	13	PA	ARMSTRONG	PA17	5542
37005204460000	-79.3564	40.9043	31	31	1019	22	PA	ARMSTRONG	PA17	4906
37005204590000	-79.4064	40.7567	32	32	1050	22	PA	ARMSTRONG	PA17	5367
37005204660000	-79.3216	40.7746	30	32	1143	19	PA	ARMSTRONG	PA17	5687
37005204670000	-79.6311	40.6566	22	21	930	14	PA	ARMSTRONG	PA17	5499
37005204810000	-79.4115	40.7576	29	30	1062	19	PA	ARMSTRONG	PA17	5333
37005205210000	-79.3647	40.7848	30	29	981	22	PA	ARMSTRONG	PA17	5506
37005205390000	-79.4079	40.8666	22	20	899	14	PA	ARMSTRONG	PA17	4803
37005205860000	-79.6583	41.0078	29	28	931	22	PA	ARMSTRONG	PA17	5364
37005206940000	-79.4078	40.7423	33	34	1097	22	PA	ARMSTRONG	PA17	5434
37005208680000	-79.3377	40.8204	30	31	1111	19	PA	ARMSTRONG	PA17	5210

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005209040000	-79.3366	40.7580	33	34	1098	22	PA	ARMSTRONG	PA17	5678
37005209490000	-79.3622	40.7418	34	35	1054	24	PA	ARMSTRONG	PA17	5597
37005209670000	-79.4410	40.8099	33	33	1005	24	PA	ARMSTRONG	PA17	5125
37005210160000	-79.3634	40.9090	25	25	1017	16	PA	ARMSTRONG	PA17	4804
37005210370000	-79.4693	40.7376	33	33	1055	22	PA	ARMSTRONG	PA17	5550
37005212010000	-79.3471	40.8848	114	132	4747	22	PA	ARMSTRONG	PA17	5074
37005213100000	-79.3855	40.8204	32	31	975	24	PA	ARMSTRONG	PA17	5241
37005213540000	-79.2500	40.9167	47	58	2051	19	PA	ARMSTRONG	PA17	5168
37005214210000	-79.4474	40.7956	28	26	885	22	PA	ARMSTRONG	PA17	5097
37005215370000	-79.4202	40.7395	31	31	1072	20	PA	ARMSTRONG	PA17	5455
37005215650000	-79.2433	40.9941	34	34	1023	24	PA	ARMSTRONG	PA17	4923
37005215740000	-79.5345	40.8958	37	36	979	28	PA	ARMSTRONG	PA17	4567
37005216730000	-79.4075	40.9080	36	36	1100	24	PA	ARMSTRONG	PA17	4624
37005218230000	-79.2366	41.0266	32	31	1009	22	PA	ARMSTRONG	PA17	4720
37005218730000	-79.4436	40.7637	32	31	998	23	PA	ARMSTRONG	PA17	5224
37005219910000	-79.2458	40.9611	31	31	1006	22	PA	ARMSTRONG	PA17	5135
37005221140000	-79.5911	40.7059	30	29	975	22	PA	ARMSTRONG	PA17	5191
37005222650000	-79.3539	40.7796	32	32	1104	21	PA	ARMSTRONG	PA17	5599
37005222660000	-79.3561	40.7845	32	33	1145	20	PA	ARMSTRONG	PA17	5593
37005222730000	-79.3754	40.7510	35	36	1143	23	PA	ARMSTRONG	PA17	5617
37005222800000	-79.2328	41.0267	34	34	1044	24	PA	ARMSTRONG	PA17	4722
37005224080000	-79.3532	40.8706	29	29	1065	19	PA	ARMSTRONG	PA17	5089
37005224090000	-79.3547	40.8676	29	29	1065	19	PA	ARMSTRONG	PA17	5066
37005225880000	-79.5889	40.8781	30	30	1043	20	PA	ARMSTRONG	PA17	4658
37005226370000	-79.2225	40.9944	30	30	1046	20	PA	ARMSTRONG	PA17	5178
37005227080000	-79.2378	40.8421	34	35	1166	21	PA	ARMSTRONG	PA17	5531
37005227320000	-79.2538	40.8884	29	29	984	21	PA	ARMSTRONG	PA17	5146
37005227830000	-79.2981	40.8659	29	30	1152	17	PA	ARMSTRONG	PA17	5331
37005227970000	-79.2425	40.8548	37	38	1145	24	PA	ARMSTRONG	PA17	5441
37005228420000	-79.2597	40.8892	32	31	991	23	PA	ARMSTRONG	PA17	5140
37005228740000	-79.2470	40.9036	29	30	1059	19	PA	ARMSTRONG	PA17	5168
37005229010000	-79.2456	40.9062	32	32	1037	22	PA	ARMSTRONG	PA17	5191
37005229280000	-79.2598	40.8307	28	30	1155	17	PA	ARMSTRONG	PA17	5688
37005229550000	-79.2599	40.8965	29	26	893	22	PA	ARMSTRONG	PA17	5129
37005229560000	-79.2627	40.8983	30	28	891	24	PA	ARMSTRONG	PA17	5131
37005229870000	-79.2569	40.8913	30	29	976	22	PA	ARMSTRONG	PA17	5169
37005230180000	-79.4959	40.7322	43	49	1547	22	PA	ARMSTRONG	PA17	5458
37005230460000	-79.4561	40.8278	47	53	1557	25	PA	ARMSTRONG	PA17	4937
37005230510000	-79.2217	40.8867	29	30	1096	18	PA	ARMSTRONG	PA17	5244

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005230610000	-79.2318	40.8624	30	31	1111	19	PA	ARMSTRONG	PA17	5353
37005230850000	-79.2515	40.8574	29	31	1130	18	PA	ARMSTRONG	PA17	5411
37005230920000	-79.2612	40.8561	29	31	1134	18	PA	ARMSTRONG	PA17	5422
37005230930000	-79.2570	40.8573	27	28	1174	15	PA	ARMSTRONG	PA17	5392
37005230940000	-79.2571	40.8613	29	31	1163	18	PA	ARMSTRONG	PA17	5370
37005230970000	-79.2344	40.8451	32	33	1121	20	PA	ARMSTRONG	PA17	5491
37005230980000	-79.2312	40.9930	24	23	1004	15	PA	ARMSTRONG	PA17	5045
37005231200000	-79.2280	40.8607	28	29	1147	16	PA	ARMSTRONG	PA17	5379
37005231290000	-79.2340	40.8646	27	27	1102	16	PA	ARMSTRONG	PA17	5330
37005231300000	-79.2350	40.8570	32	33	1129	20	PA	ARMSTRONG	PA17	5392
37005231440000	-79.2400	40.9024	24	24	1070	14	PA	ARMSTRONG	PA17	5187
37005231830000	-79.2623	40.8787	33	34	1130	21	PA	ARMSTRONG	PA17	5209
37005231840000	-79.2619	40.8830	32	33	1116	20	PA	ARMSTRONG	PA17	5180
37005231880000	-79.2601	40.8673	38	39	1100	26	PA	ARMSTRONG	PA17	5265
37005231920000	-79.2627	40.9005	29	28	923	22	PA	ARMSTRONG	PA17	5158
37005231950000	-79.2257	40.8565	28	30	1141	17	PA	ARMSTRONG	PA17	5422
37005232140000	-79.2677	40.8940	31	30	995	22	PA	ARMSTRONG	PA17	5177
37005232290000	-79.3043	40.8662	28	28	1047	18	PA	ARMSTRONG	PA17	5254
37005232460000	-79.2178	41.0140	31	31	1005	22	PA	ARMSTRONG	PA17	4984
37005232570000	-79.4537	40.8311	35	36	1129	23	PA	ARMSTRONG	PA17	4945
37005232660000	-79.2944	40.8250	28	30	1156	17	PA	ARMSTRONG	PA17	5477
37005232670000	-79.4461	40.8327	32	33	1099	21	PA	ARMSTRONG	PA17	4995
37005232770000	-79.3153	40.8129	38	39	1142	25	PA	ARMSTRONG	PA17	5359
37005232840000	-79.3110	40.8473	29	29	1052	19	PA	ARMSTRONG	PA17	5219
37005232850000	-79.2431	40.9040	31	30	1018	21	PA	ARMSTRONG	PA17	5185
37005232910000	-79.2665	40.8664	27	28	1140	16	PA	ARMSTRONG	PA17	5268
37005232920000	-79.2630	40.8719	34	35	1118	23	PA	ARMSTRONG	PA17	5220
37005233100000	-79.3686	40.8070	30	30	1072	20	PA	ARMSTRONG	PA17	5330
37005233130000	-79.4854	40.7201	36	37	1118	24	PA	ARMSTRONG	PA17	5591
37005233210000	-79.2753	40.8454	32	33	1128	21	PA	ARMSTRONG	PA17	5546
37005233240000	-79.3616	40.8175	30	31	1088	19	PA	ARMSTRONG	PA17	5287
37005233270000	-79.2185	40.8550	35	36	1100	24	PA	ARMSTRONG	PA17	5476
37005233320000	-79.3005	40.8270	31	32	1081	20	PA	ARMSTRONG	PA17	5361
37005233380000	-79.5906	40.8980	66	81	2654	21	PA	ARMSTRONG	PA17	4711
37005233480000	-79.2884	40.8665	31	31	1071	21	PA	ARMSTRONG	PA17	5292
37005233570000	-79.2827	40.8589	32	33	1072	22	PA	ARMSTRONG	PA17	5363
37005233580000	-79.2789	40.8611	37	37	1087	25	PA	ARMSTRONG	PA17	5334
37005233610000	-79.3179	40.8835	27	27	1044	17	PA	ARMSTRONG	PA17	5227
37005233620000	-79.3173	40.8806	32	31	997	23	PA	ARMSTRONG	PA17	5204

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005233630000	-79.4682	40.8294	42	46	1351	25	PA	ARMSTRONG	PA17	4826
37005233650000	-79.2300	40.8571	31	32	1129	19	PA	ARMSTRONG	PA17	5410
37005233660000	-79.2325	40.8594	34	35	1130	22	PA	ARMSTRONG	PA17	5377
37005233690000	-79.4684	40.8263	30	31	1111	19	PA	ARMSTRONG	PA17	4822
37005233730000	-79.2644	40.8746	32	33	1108	20	PA	ARMSTRONG	PA17	5205
37005233760000	-79.3525	40.7902	32	33	1150	20	PA	ARMSTRONG	PA17	5538
37005233770000	-79.2607	41.0225	31	30	986	22	PA	ARMSTRONG	PA17	4628
37005233830000	-79.3438	40.7955	31	32	1130	19	PA	ARMSTRONG	PA17	5478
37005233840000	-79.3019	40.8073	32	34	1162	20	PA	ARMSTRONG	PA17	5571
37005233850000	-79.2937	40.8053	31	31	1088	20	PA	ARMSTRONG	PA17	5609
37005233880000	-79.2518	40.9010	32	32	1039	22	PA	ARMSTRONG	PA17	5139
37005233920000	-79.3041	40.8232	29	30	1097	19	PA	ARMSTRONG	PA17	5389
37005233940000	-79.3575	40.7985	27	28	1080	17	PA	ARMSTRONG	PA17	5453
37005234000000	-79.3854	40.8228	30	31	1102	19	PA	ARMSTRONG	PA17	5239
37005234010000	-79.3829	40.8204	27	28	1103	16	PA	ARMSTRONG	PA17	5232
37005234180000	-79.2987	40.8051	28	29	1106	17	PA	ARMSTRONG	PA17	5611
37005234230000	-79.3481	40.7975	27	28	1124	16	PA	ARMSTRONG	PA17	5432
37005234250000	-79.3438	40.7921	27	28	1141	15	PA	ARMSTRONG	PA17	5514
37005234320000	-79.3277	40.9101	32	33	1091	21	PA	ARMSTRONG	PA17	5115
37005234400000	-79.2878	40.8588	28	29	1071	18	PA	ARMSTRONG	PA17	5390
37005234450000	-79.2612	41.0186	33	32	980	24	PA	ARMSTRONG	PA17	4625
37005234460000	-79.3726	40.8081	34	34	1072	23	PA	ARMSTRONG	PA17	5344
37005234610000	-79.4713	40.8278	32	33	1134	20	PA	ARMSTRONG	PA17	4816
37005234620000	-79.2218	41.0170	30	29	988	21	PA	ARMSTRONG	PA17	4913
37005234630000	-79.4751	40.8231	37	38	1096	26	PA	ARMSTRONG	PA17	4770
37005234890000	-79.2308	40.9631	28	27	963	19	PA	ARMSTRONG	PA17	5151
37005235000000	-79.2338	40.8673	31	32	1122	19	PA	ARMSTRONG	PA17	5329
37005235010000	-79.2637	40.8683	29	30	1081	19	PA	ARMSTRONG	PA17	5258
37005235030000	-79.2796	40.8729	27	27	1054	17	PA	ARMSTRONG	PA17	5233
37005235040000	-79.4712	40.8270	31	31	1111	19	PA	ARMSTRONG	PA17	4782
37005235050000	-79.3267	40.8046	33	35	1157	21	PA	ARMSTRONG	PA17	5395
37005235150000	-79.3235	40.8084	31	32	1101	20	PA	ARMSTRONG	PA17	5337
37005235200000	-79.3642	40.8587	30	31	1083	19	PA	ARMSTRONG	PA17	5051
37005235210000	-79.3640	40.8621	28	27	934	21	PA	ARMSTRONG	PA17	5018
37005235220000	-79.3633	40.8668	30	29	974	22	PA	ARMSTRONG	PA17	5041
37005235240000	-79.2229	40.8561	30	30	1080	19	PA	ARMSTRONG	PA17	5439
37005235250000	-79.3181	40.8524	28	28	1092	17	PA	ARMSTRONG	PA17	5173
37005235370000	-79.3005	40.9428	30	31	1120	19	PA	ARMSTRONG	PA17	4981
37005235400000	-79.3902	40.8067	30	30	1016	21	PA	ARMSTRONG	PA17	5304

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005235570000	-79.3157	40.7773	31	32	1155	19	PA	ARMSTRONG	PA17	5654
37005235580000	-79.3206	40.7773	28	29	1148	16	PA	ARMSTRONG	PA17	5656
37005235590000	-79.3206	40.7740	30	32	1194	18	PA	ARMSTRONG	PA17	5695
37005235630000	-79.4102	40.7904	25	25	1072	15	PA	ARMSTRONG	PA17	5348
37005235640000	-79.2666	40.8724	29	30	1081	19	PA	ARMSTRONG	PA17	5221
37005235800000	-79.2667	40.8794	29	30	1059	19	PA	ARMSTRONG	PA17	5199
37005235880000	-79.4692	40.8369	31	32	1123	19	PA	ARMSTRONG	PA17	4838
37005235920000	-79.4764	40.8454	46	47	1162	31	PA	ARMSTRONG	PA17	4724
37005235980000	-79.4652	40.8321	29	30	1089	19	PA	ARMSTRONG	PA17	4802
37005235990000	-79.3076	40.8259	31	32	1109	20	PA	ARMSTRONG	PA17	5325
37005236000000	-79.4611	40.8328	30	31	1104	19	PA	ARMSTRONG	PA17	4865
37005236010000	-79.3281	40.7711	30	32	1173	18	PA	ARMSTRONG	PA17	5659
37005236080000	-79.2279	40.8546	31	32	1125	19	PA	ARMSTRONG	PA17	5458
37005236090000	-79.3066	40.9495	45	49	1356	26	PA	ARMSTRONG	PA17	4918
37005236120000	-79.3671	40.7794	31	32	1141	19	PA	ARMSTRONG	PA17	5638
37005236160000	-79.4640	40.8350	32	33	1116	21	PA	ARMSTRONG	PA17	4822
37005236320000	-79.3248	40.7781	28	29	1109	17	PA	ARMSTRONG	PA17	5628
37005236360000	-79.3243	40.7810	30	31	1110	19	PA	ARMSTRONG	PA17	5618
37005236470000	-79.2281	41.0304	28	27	950	20	PA	ARMSTRONG	PA17	4739
37005236500000	-79.2348	40.9918	29	29	1018	20	PA	ARMSTRONG	PA17	4998
37005236530000	-79.2791	40.9519	32	31	960	24	PA	ARMSTRONG	PA17	4990
37005236570000	-79.4485	40.8307	29	29	1057	19	PA	ARMSTRONG	PA17	4958
37005236580000	-79.3771	40.8151	29	30	1086	18	PA	ARMSTRONG	PA17	5267
37005236600000	-79.2896	40.8454	31	31	1052	21	PA	ARMSTRONG	PA17	5462
37005236610000	-79.2358	40.8900	29	29	1084	18	PA	ARMSTRONG	PA17	5198
37005236740000	-79.5150	40.8600	32	31	995	23	PA	ARMSTRONG	PA17	4530
37005236770000	-79.5025	40.8401	30	31	1098	19	PA	ARMSTRONG	PA17	4622
37005236840000	-79.2315	41.0321	24	21	816	18	PA	ARMSTRONG	PA17	4732
37005237060000	-79.2414	40.9223	29	29	1051	19	PA	ARMSTRONG	PA17	5156
37005237120000	-79.4505	40.7427	39	41	1233	24	PA	ARMSTRONG	PA17	5505
37005237250000	-79.3236	40.9104	21	21	1039	12	PA	ARMSTRONG	PA17	5096
37005237260000	-79.3597	40.8642	27	27	1043	17	PA	ARMSTRONG	PA17	4983
37005237270000	-79.3595	40.8611	28	28	1042	18	PA	ARMSTRONG	PA17	4977
37005237280000	-79.3595	40.8578	28	28	1013	19	PA	ARMSTRONG	PA17	4962
37005237290000	-79.2712	40.9345	29	29	1025	20	PA	ARMSTRONG	PA17	5180
37005237480000	-79.3061	40.9401	28	26	913	20	PA	ARMSTRONG	PA17	5004
37005237530000	-79.3295	40.9526	29	30	1097	19	PA	ARMSTRONG	PA17	4887
37005237620000	-79.4041	40.8400	29	28	968	21	PA	ARMSTRONG	PA17	5086
37005237700000	-79.2388	40.8393	31	32	1128	19	PA	ARMSTRONG	PA17	5576

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005237730000	-79.3440	40.7563	30	31	1130	19	PA	ARMSTRONG	PA17	5652
37005237770000	-79.3196	40.8425	29	30	1088	19	PA	ARMSTRONG	PA17	5129
37005237810000	-79.4685	40.8219	30	31	1100	19	PA	ARMSTRONG	PA17	4828
37005237860000	-79.3332	40.7842	29	30	1106	18	PA	ARMSTRONG	PA17	5563
37005237870000	-79.4681	40.8451	33	31	915	26	PA	ARMSTRONG	PA17	4782
37005238160000	-79.3198	40.8163	30	31	1097	19	PA	ARMSTRONG	PA17	5285
37005238190000	-79.2447	40.9158	26	25	967	18	PA	ARMSTRONG	PA17	5117
37005238220000	-79.3471	40.8034	29	29	1044	19	PA	ARMSTRONG	PA17	5384
37005238230000	-79.3589	40.8096	28	29	1072	18	PA	ARMSTRONG	PA17	5346
37005238320000	-79.4722	40.8214	30	31	1103	19	PA	ARMSTRONG	PA17	4805
37005238440000	-79.3173	40.8497	29	29	1026	20	PA	ARMSTRONG	PA17	5169
37005238450000	-79.4918	40.8535	30	31	1102	19	PA	ARMSTRONG	PA17	4611
37005238460000	-79.2982	40.8309	29	29	1057	19	PA	ARMSTRONG	PA17	5368
37005238550000	-79.4867	40.8241	32	32	1106	20	PA	ARMSTRONG	PA17	4674
37005238560000	-79.4852	40.8350	31	33	1169	19	PA	ARMSTRONG	PA17	4688
37005238570000	-79.4731	40.7290	30	31	1091	19	PA	ARMSTRONG	PA17	5555
37005238590000	-79.3368	40.8337	31	31	1086	20	PA	ARMSTRONG	PA17	5135
37005238600000	-79.2727	40.9402	28	27	1002	19	PA	ARMSTRONG	PA17	5112
37005238770000	-79.3955	40.7959	31	32	1116	19	PA	ARMSTRONG	PA17	5476
37005238870000	-79.4597	40.8181	33	34	1111	22	PA	ARMSTRONG	PA17	4966
37005238890000	-79.5105	40.8441	33	34	1098	22	PA	ARMSTRONG	PA17	4632
37005238900000	-79.2269	40.9898	29	30	1053	19	PA	ARMSTRONG	PA17	5154
37005238930000	-79.5170	40.7508	32	34	1199	19	PA	ARMSTRONG	PA17	5088
37005238950000	-79.4377	40.8419	30	31	1120	19	PA	ARMSTRONG	PA17	5050
37005239010000	-79.4290	40.8328	29	30	1092	19	PA	ARMSTRONG	PA17	5146
37005239020000	-79.4478	40.8484	32	33	1150	20	PA	ARMSTRONG	PA17	4966
37005239030000	-79.4546	40.8466	29	30	1101	18	PA	ARMSTRONG	PA17	4871
37005239040000	-79.4918	40.8402	30	31	1135	18	PA	ARMSTRONG	PA17	4663
37005239070000	-79.2307	40.9903	28	27	1004	19	PA	ARMSTRONG	PA17	5116
37005239110000	-79.4829	40.8492	33	35	1153	21	PA	ARMSTRONG	PA17	4678
37005239260000	-79.2872	40.9457	32	32	992	23	PA	ARMSTRONG	PA17	4995
37005239320000	-79.2582	40.8249	30	31	1117	19	PA	ARMSTRONG	PA17	5702
37005239380000	-79.5415	40.6496	31	32	1146	19	PA	ARMSTRONG	PA17	5639
37005239390000	-79.5228	40.7467	29	30	1116	18	PA	ARMSTRONG	PA17	5075
37005239410000	-79.4378	40.8390	31	31	1102	20	PA	ARMSTRONG	PA17	5065
37005239430000	-79.2274	40.9943	29	29	1012	20	PA	ARMSTRONG	PA17	5095
37005239440000	-79.4604	40.8399	29	31	1131	18	PA	ARMSTRONG	PA17	4837
37005239460000	-79.4502	40.8465	37	38	1110	25	PA	ARMSTRONG	PA17	4935
37005239570000	-79.3983	40.9079	32	32	1063	21	PA	ARMSTRONG	PA17	4613

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005239650000	-79.4611	40.8434	28	28	1081	17	PA	ARMSTRONG	PA17	4815
37005239670000	-79.4481	40.8276	28	29	1074	18	PA	ARMSTRONG	PA17	5007
37005239700000	-79.2326	40.8522	31	32	1132	19	PA	ARMSTRONG	PA17	5454
37005239720000	-79.2324	40.8494	31	32	1132	19	PA	ARMSTRONG	PA17	5468
37005239910000	-79.4036	40.9058	32	34	1141	20	PA	ARMSTRONG	PA17	4642
37005239940000	-79.4448	40.8267	31	31	1100	20	PA	ARMSTRONG	PA17	5056
37005239950000	-79.2996	40.8536	24	25	1096	14	PA	ARMSTRONG	PA17	5370
37005239990000	-79.2412	40.9121	27	27	1022	18	PA	ARMSTRONG	PA17	5166
37005240010000	-79.3130	40.8529	30	31	1088	19	PA	ARMSTRONG	PA17	5248
37005240070000	-79.2464	40.9986	28	28	1055	18	PA	ARMSTRONG	PA17	4843
37005240220000	-79.4348	40.8369	31	32	1120	20	PA	ARMSTRONG	PA17	5105
37005240230000	-79.3269	40.8383	31	32	1129	20	PA	ARMSTRONG	PA17	5139
37005240330000	-79.4499	40.8213	29	29	1043	20	PA	ARMSTRONG	PA17	4989
37005240360000	-79.4577	40.8158	27	27	1044	17	PA	ARMSTRONG	PA17	4948
37005240450000	-79.4964	40.7685	32	34	1159	20	PA	ARMSTRONG	PA17	5122
37005240460000	-79.5090	40.7505	31	32	1176	18	PA	ARMSTRONG	PA17	5175
37005240470000	-79.5040	40.7521	32	34	1173	20	PA	ARMSTRONG	PA17	5194
37005240480000	-79.4533	40.8257	31	31	1100	20	PA	ARMSTRONG	PA17	4950
37005240520000	-79.5022	40.7549	33	35	1191	20	PA	ARMSTRONG	PA17	5208
37005240530000	-79.5169	40.7398	31	33	1170	19	PA	ARMSTRONG	PA17	5175
37005240550000	-79.4905	40.7620	29	31	1159	18	PA	ARMSTRONG	PA17	5209
37005240560000	-79.5146	40.7310	33	35	1161	21	PA	ARMSTRONG	PA17	5268
37005240570000	-79.5026	40.7369	30	31	1152	18	PA	ARMSTRONG	PA17	5319
37005240620000	-79.3188	40.8357	27	28	1090	17	PA	ARMSTRONG	PA17	5140
37005240670000	-79.3989	40.8959	27	28	1139	16	PA	ARMSTRONG	PA17	4733
37005240770000	-79.5209	40.7420	32	33	1158	20	PA	ARMSTRONG	PA17	5128
37005240800000	-79.5150	40.7484	26	24	894	19	PA	ARMSTRONG	PA17	5130
37005240820000	-79.3983	40.9019	30	31	1125	19	PA	ARMSTRONG	PA17	4717
37005240890000	-79.4923	40.7551	28	30	1160	17	PA	ARMSTRONG	PA17	5280
37005240910000	-79.5418	40.6421	29	30	1101	18	PA	ARMSTRONG	PA17	5581
37005240920000	-79.3989	40.8988	30	31	1155	18	PA	ARMSTRONG	PA17	4729
37005240960000	-79.5454	40.6417	28	26	924	20	PA	ARMSTRONG	PA17	5575
37005240970000	-79.5381	40.6417	28	29	1092	18	PA	ARMSTRONG	PA17	5587
37005241000000	-79.4090	40.9040	31	32	1140	19	PA	ARMSTRONG	PA17	4628
37005241010000	-79.4919	40.7595	33	34	1140	21	PA	ARMSTRONG	PA17	5209
37005241020000	-79.4539	40.8519	23	24	1122	13	PA	ARMSTRONG	PA17	4867
37005241140000	-79.3906	40.8308	28	27	977	19	PA	ARMSTRONG	PA17	5196
37005241150000	-79.3904	40.8344	27	27	1023	18	PA	ARMSTRONG	PA17	5126
37005241180000	-79.4889	40.7746	27	25	875	21	PA	ARMSTRONG	PA17	5079

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005241190000	-79.4514	40.8346	29	31	1134	18	PA	ARMSTRONG	PA17	4957
37005241260000	-79.4250	40.8291	26	23	870	19	PA	ARMSTRONG	PA17	5189
37005241310000	-79.4243	40.9229	27	25	939	19	PA	ARMSTRONG	PA17	4587
37005241350000	-79.3808	40.8151	27	26	977	19	PA	ARMSTRONG	PA17	5276
37005241360000	-79.3956	40.9229	29	30	1102	19	PA	ARMSTRONG	PA17	4619
37005241460000	-79.4524	40.8097	33	34	1106	22	PA	ARMSTRONG	PA17	5128
37005241470000	-79.4197	40.8908	33	34	1113	22	PA	ARMSTRONG	PA17	4625
37005241500000	-79.4158	40.8962	23	24	1141	12	PA	ARMSTRONG	PA17	4623
37005241510000	-79.4123	40.8920	28	29	1093	18	PA	ARMSTRONG	PA17	4637
37005241520000	-79.4122	40.8950	30	31	1131	19	PA	ARMSTRONG	PA17	4659
37005241560000	-79.5368	40.6446	31	32	1122	20	PA	ARMSTRONG	PA17	5570
37005241630000	-79.3797	40.9069	29	30	1116	18	PA	ARMSTRONG	PA17	4774
37005241660000	-79.3938	40.9023	31	31	1108	19	PA	ARMSTRONG	PA17	4692
37005241720000	-79.5636	40.6332	33	34	1138	21	PA	ARMSTRONG	PA17	5620
37005241790000	-79.5538	40.6387	29	30	1099	18	PA	ARMSTRONG	PA17	5623
37005241900000	-79.4388	40.8177	33	34	1064	23	PA	ARMSTRONG	PA17	5101
37005242000000	-79.3890	40.8383	26	23	839	20	PA	ARMSTRONG	PA17	5071
37005242040000	-79.4110	40.9018	29	31	1141	18	PA	ARMSTRONG	PA17	4632
37005242080000	-79.4090	40.8995	29	31	1125	18	PA	ARMSTRONG	PA17	4648
37005242200000	-79.5438	40.6379	29	28	963	21	PA	ARMSTRONG	PA17	5581
37005242320000	-79.4591	40.8215	24	25	1143	13	PA	ARMSTRONG	PA17	4956
37005242330000	-79.4624	40.8204	29	31	1134	18	PA	ARMSTRONG	PA17	4901
37005242340000	-79.4650	40.8228	31	32	1117	19	PA	ARMSTRONG	PA17	4844
37005242350000	-79.3685	40.9254	29	30	1102	18	PA	ARMSTRONG	PA17	4729
37005242370000	-79.5438	40.6473	29	28	1009	20	PA	ARMSTRONG	PA17	5645
37005242410000	-79.3649	40.9237	31	32	1160	19	PA	ARMSTRONG	PA17	4797
37005242460000	-79.3830	40.9084	29	30	1118	18	PA	ARMSTRONG	PA17	4745
37005242510000	-79.4515	40.8489	34	35	1115	22	PA	ARMSTRONG	PA17	4905
37005242610000	-79.2349	40.8393	32	34	1152	20	PA	ARMSTRONG	PA17	5580
37005242620000	-79.3914	40.8266	29	30	1113	18	PA	ARMSTRONG	PA17	5208
37005242660000	-79.3108	40.8831	29	29	1024	19	PA	ARMSTRONG	PA17	5172
37005242670000	-79.2789	40.9113	29	29	1042	19	PA	ARMSTRONG	PA17	5185
37005242690000	-79.2700	40.9427	27	27	998	18	PA	ARMSTRONG	PA17	5073
37005242700000	-79.4441	40.8489	27	28	1125	16	PA	ARMSTRONG	PA17	4947
37005242770000	-79.3873	40.9048	29	30	1112	18	PA	ARMSTRONG	PA17	4726
37005242780000	-79.3775	40.7719	34	36	1130	23	PA	ARMSTRONG	PA17	5593
37005242800000	-79.3672	40.7766	32	34	1150	20	PA	ARMSTRONG	PA17	5625
37005242910000	-79.4162	40.8759	28	28	1041	19	PA	ARMSTRONG	PA17	4655
37005242920000	-79.3939	40.8984	27	28	1125	16	PA	ARMSTRONG	PA17	4755

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005243040000	-79.5496	40.7499	31	32	1130	19	PA	ARMSTRONG	PA17	5010
37005243050000	-79.4195	40.9074	31	32	1152	19	PA	ARMSTRONG	PA17	4633
37005243060000	-79.4492	40.8510	29	31	1145	18	PA	ARMSTRONG	PA17	4923
37005243080000	-79.2860	40.9582	33	34	1132	21	PA	ARMSTRONG	PA17	5006
37005243150000	-79.4154	40.8938	35	36	1114	23	PA	ARMSTRONG	PA17	4616
37005243160000	-79.3880	40.8419	23	20	809	18	PA	ARMSTRONG	PA17	5018
37005243220000	-79.3855	40.8957	29	31	1128	18	PA	ARMSTRONG	PA17	4793
37005243290000	-79.3440	40.8207	32	33	1137	20	PA	ARMSTRONG	PA17	5204
37005243300000	-79.3860	40.8369	24	22	871	18	PA	ARMSTRONG	PA17	5124
37005243310000	-79.3856	40.8399	25	23	869	18	PA	ARMSTRONG	PA17	5058
37005243360000	-79.2133	41.0167	27	24	832	21	PA	ARMSTRONG	PA17	4970
37005243390000	-79.5376	40.8626	26	26	1052	16	PA	ARMSTRONG	PA17	4656
37005243400000	-79.4904	40.7668	29	30	1117	18	PA	ARMSTRONG	PA17	5148
37005243410000	-79.4163	40.8790	28	29	1067	18	PA	ARMSTRONG	PA17	4657
37005243420000	-79.4409	40.8476	26	27	1146	15	PA	ARMSTRONG	PA17	4979
37005243440000	-79.5221	40.6718	31	33	1211	18	PA	ARMSTRONG	PA17	5623
37005243450000	-79.3790	40.8512	27	24	840	21	PA	ARMSTRONG	PA17	5063
37005243470000	-79.3721	40.8555	24	22	871	18	PA	ARMSTRONG	PA17	5068
37005243480000	-79.3725	40.8513	27	25	900	20	PA	ARMSTRONG	PA17	5102
37005243540000	-79.4485	40.7990	31	31	1083	20	PA	ARMSTRONG	PA17	5062
37005243550000	-79.2829	40.9512	28	28	992	19	PA	ARMSTRONG	PA17	4992
37005243610000	-79.5406	40.6448	30	29	996	21	PA	ARMSTRONG	PA17	5627
37005243630000	-79.5323	40.6764	33	35	1210	20	PA	ARMSTRONG	PA17	5611
37005243640000	-79.4581	40.8349	29	30	1093	19	PA	ARMSTRONG	PA17	4887
37005243650000	-79.5320	40.6593	28	26	947	20	PA	ARMSTRONG	PA17	5614
37005243660000	-79.5203	40.8610	29	29	1020	20	PA	ARMSTRONG	PA17	4578
37005243690000	-79.5290	40.6780	34	36	1203	20	PA	ARMSTRONG	PA17	5625
37005243710000	-79.5520	40.6553	30	29	960	22	PA	ARMSTRONG	PA17	5631
37005243720000	-79.4400	40.8502	29	30	1080	19	PA	ARMSTRONG	PA17	4870
37005243730000	-79.4129	40.8861	28	28	1077	17	PA	ARMSTRONG	PA17	4652
37005243750000	-79.2817	40.9342	29	28	966	21	PA	ARMSTRONG	PA17	5042
37005243820000	-79.5306	40.6871	31	33	1169	19	PA	ARMSTRONG	PA17	5539
37005243830000	-79.5351	40.6608	28	27	933	21	PA	ARMSTRONG	PA17	5607
37005243920000	-79.4017	40.8029	27	25	952	19	PA	ARMSTRONG	PA17	5315
37005244000000	-79.3118	40.8251	33	35	1181	21	PA	ARMSTRONG	PA17	5292
37005244010000	-79.3329	40.9473	27	26	970	18	PA	ARMSTRONG	PA17	4927
37005244020000	-79.3294	40.9482	28	27	968	20	PA	ARMSTRONG	PA17	4932
37005244050000	-79.3946	40.8250	24	20	783	19	PA	ARMSTRONG	PA17	5191
37005244060000	-79.5789	40.6355	27	25	886	21	PA	ARMSTRONG	PA17	5540

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005244090000	-79.3739	40.9112	29	30	1052	19	PA	ARMSTRONG	PA17	4727
37005244100000	-79.3701	40.9110	29	29	1100	18	PA	ARMSTRONG	PA17	4795
37005244140000	-79.5231	40.6606	38	40	1189	25	PA	ARMSTRONG	PA17	5652
37005244170000	-79.3724	40.9136	31	32	1094	20	PA	ARMSTRONG	PA17	4761
37005244180000	-79.5314	40.6535	31	30	944	23	PA	ARMSTRONG	PA17	5596
37005244190000	-79.4538	40.8368	31	32	1123	19	PA	ARMSTRONG	PA17	4922
37005244200000	-79.4095	40.8905	30	31	1086	19	PA	ARMSTRONG	PA17	4671
37005244210000	-79.4090	40.8934	31	31	1110	19	PA	ARMSTRONG	PA17	4651
37005244230000	-79.3241	40.9259	21	21	1060	11	PA	ARMSTRONG	PA17	5042
37005244240000	-79.3350	40.9447	27	25	864	21	PA	ARMSTRONG	PA17	4803
37005244270000	-79.4356	40.8552	28	28	1064	18	PA	ARMSTRONG	PA17	4815
37005244280000	-79.4302	40.8564	28	29	1057	18	PA	ARMSTRONG	PA17	4802
37005244300000	-79.3240	40.9531	27	26	964	19	PA	ARMSTRONG	PA17	4889
37005244310000	-79.5260	40.6590	33	35	1158	21	PA	ARMSTRONG	PA17	5648
37005244350000	-79.3960	40.7863	30	30	1069	20	PA	ARMSTRONG	PA17	5443
37005244400000	-79.5280	40.6643	28	27	961	20	PA	ARMSTRONG	PA17	5623
37005244420000	-79.4446	40.7572	31	31	1102	20	PA	ARMSTRONG	PA17	5353
37005244430000	-79.4486	40.7586	29	30	1113	18	PA	ARMSTRONG	PA17	5331
37005244450000	-79.4210	40.7589	29	30	1163	17	PA	ARMSTRONG	PA17	5341
37005244480000	-79.2800	40.9032	33	36	1223	20	PA	ARMSTRONG	PA17	5192
37005244500000	-79.3828	40.8418	25	22	793	20	PA	ARMSTRONG	PA17	5046
37005244520000	-79.3403	40.9229	27	26	922	20	PA	ARMSTRONG	PA17	4918
37005244590000	-79.4447	40.7983	33	33	1030	23	PA	ARMSTRONG	PA17	5075
37005244620000	-79.4637	40.7548	29	31	1164	18	PA	ARMSTRONG	PA17	5404
37005244670000	-79.4483	40.8013	28	28	1016	19	PA	ARMSTRONG	PA17	5054
37005244770000	-79.2933	40.9194	26	25	965	18	PA	ARMSTRONG	PA17	5066
37005244790000	-79.5318	40.6726	28	27	1016	18	PA	ARMSTRONG	PA17	5650
37005244800000	-79.4649	40.7775	29	31	1129	18	PA	ARMSTRONG	PA17	5140
37005244820000	-79.4648	40.7944	27	28	1134	16	PA	ARMSTRONG	PA17	5145
37005244860000	-79.5705	40.7272	29	31	1145	18	PA	ARMSTRONG	PA17	5114
37005244880000	-79.3825	40.8460	27	23	741	25	PA	ARMSTRONG	PA17	4994
37005244910000	-79.3376	40.9520	25	24	960	17	PA	ARMSTRONG	PA17	4879
37005244960000	-79.3326	40.9248	27	24	886	20	PA	ARMSTRONG	PA17	4909
37005244970000	-79.4232	40.8269	21	18	846	14	PA	ARMSTRONG	PA17	5213
37005244990000	-79.3793	40.9003	32	33	1144	20	PA	ARMSTRONG	PA17	4827
37005245000000	-79.3797	40.9034	30	31	1137	18	PA	ARMSTRONG	PA17	4807
37005245010000	-79.4313	40.7671	32	33	1107	20	PA	ARMSTRONG	PA17	5258
37005245030000	-79.5471	40.7334	29	31	1154	18	PA	ARMSTRONG	PA17	5103
37005245040000	-79.3364	40.9572	27	26	979	19	PA	ARMSTRONG	PA17	4866

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37005245050000	-79.5143	40.6711	30	29	975	22	PA	ARMSTRONG	PA17	5610
37005245060000	-79.5595	40.6790	32	33	1066	22	PA	ARMSTRONG	PA17	5615
37005245080000	-79.4588	40.8018	29	29	1052	19	PA	ARMSTRONG	PA17	5159
37005245100000	-79.2888	40.9484	31	30	979	22	PA	ARMSTRONG	PA17	4977
37005245120000	-79.4056	40.7819	30	31	1145	18	PA	ARMSTRONG	PA17	5399
37005245130000	-79.4520	40.7959	30	31	1132	19	PA	ARMSTRONG	PA17	5142
37005245150000	-79.4297	40.8026	29	30	1116	18	PA	ARMSTRONG	PA17	5172
37005245170000	-79.4686	40.7915	28	29	1106	17	PA	ARMSTRONG	PA17	5105
37005245190000	-79.4327	40.8174	29	30	1115	18	PA	ARMSTRONG	PA17	5193
37005245200000	-79.5249	40.6688	27	26	924	20	PA	ARMSTRONG	PA17	5609
37005245350000	-79.4129	40.7471	31	32	1118	19	PA	ARMSTRONG	PA17	5413
37005245360000	-79.4089	40.7485	29	31	1143	18	PA	ARMSTRONG	PA17	5429
37005245370000	-79.4286	40.8593	27	27	1076	16	PA	ARMSTRONG	PA17	4823
37005245380000	-79.4356	40.8191	19	16	786	13	PA	ARMSTRONG	PA17	5092
37005245390000	-79.3340	40.8377	31	32	1119	19	PA	ARMSTRONG	PA17	5095
37005245400000	-79.4684	40.7954	31	32	1127	19	PA	ARMSTRONG	PA17	5092
37005245410000	-79.2959	40.9982	28	28	1048	18	PA	ARMSTRONG	PA17	4596
37005245420000	-79.3719	40.9091	29	30	1052	19	PA	ARMSTRONG	PA17	4755
37005245430000	-79.3618	40.7448	33	34	1109	22	PA	ARMSTRONG	PA17	5603
37005245480000	-79.4163	40.7360	33	34	1162	20	PA	ARMSTRONG	PA17	5552
37005245490000	-79.3865	40.7441	31	32	1154	19	PA	ARMSTRONG	PA17	5561
37005245570000	-79.4027	40.8980	30	31	1135	19	PA	ARMSTRONG	PA17	4695
37005245580000	-79.2886	40.9534	32	33	1131	20	PA	ARMSTRONG	PA17	5015
37005245610000	-79.4163	40.8165	26	23	845	20	PA	ARMSTRONG	PA17	5302
37005245640000	-79.4147	40.7529	28	29	1088	18	PA	ARMSTRONG	PA17	5337
37005245650000	-79.3014	40.9981	28	29	1076	18	PA	ARMSTRONG	PA17	4622
37005245660000	-79.5066	40.6753	28	27	945	20	PA	ARMSTRONG	PA17	5559
37005245680000	-79.2993	40.9627	30	31	1130	19	PA	ARMSTRONG	PA17	4860
37005245690000	-79.4220	40.8144	23	21	920	15	PA	ARMSTRONG	PA17	5257
37005245700000	-79.4645	40.8448	32	33	1117	20	PA	ARMSTRONG	PA17	4787
37005245720000	-79.3479	40.8223	35	36	1132	23	PA	ARMSTRONG	PA17	5203
37005245750000	-79.4584	40.7938	30	31	1142	18	PA	ARMSTRONG	PA17	5153
37005245770000	-79.3722	40.7409	32	34	1175	20	PA	ARMSTRONG	PA17	5614
37005245800000	-79.5097	40.6739	31	30	979	23	PA	ARMSTRONG	PA17	5603
37005245810000	-79.2772	40.9304	30	29	948	22	PA	ARMSTRONG	PA17	5091
37005245820000	-79.4032	40.8149	24	21	839	18	PA	ARMSTRONG	PA17	5295
37005245840000	-79.4034	40.8110	28	25	868	22	PA	ARMSTRONG	PA17	5336
37005245870000	-79.3365	40.9608	23	23	1052	14	PA	ARMSTRONG	PA17	4854
37005245880000	-79.3402	40.9608	31	31	1052	21	PA	ARMSTRONG	PA17	4857

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005245900000	-79.5184	40.7539	28	29	1128	17	PA	ARMSTRONG	PA17	5090
37005245910000	-79.4179	40.8348	24	22	838	18	PA	ARMSTRONG	PA17	5130
37005245920000	-79.4608	40.7873	29	30	1112	18	PA	ARMSTRONG	PA17	5107
37005245930000	-79.3011	40.9156	31	31	1031	21	PA	ARMSTRONG	PA17	5088
37005245950000	-79.4730	40.7866	29	30	1087	19	PA	ARMSTRONG	PA17	5077
37005245960000	-79.4708	40.7889	31	32	1128	19	PA	ARMSTRONG	PA17	5098
37005245990000	-79.5394	40.6792	33	34	1122	21	PA	ARMSTRONG	PA17	5581
37005246020000	-79.4429	40.8537	33	33	1061	22	PA	ARMSTRONG	PA17	4809
37005246060000	-79.4897	40.7712	27	25	890	20	PA	ARMSTRONG	PA17	5132
37005246140000	-79.3401	40.8787	31	31	1041	21	PA	ARMSTRONG	PA17	5149
37005246170000	-79.2451	40.8292	29	31	1138	18	PA	ARMSTRONG	PA17	5648
37005246180000	-79.2677	40.9345	29	29	1066	19	PA	ARMSTRONG	PA17	5205
37005246190000	-79.2674	40.9372	31	31	1093	20	PA	ARMSTRONG	PA17	5199
37005246200000	-79.5195	40.7450	27	25	919	19	PA	ARMSTRONG	PA17	5122
37005246210000	-79.4629	40.7908	29	30	1096	18	PA	ARMSTRONG	PA17	5119
37005246220000	-79.5561	40.6799	26	26	1062	16	PA	ARMSTRONG	PA17	5588
37005246290000	-79.3769	40.8329	26	22	778	21	PA	ARMSTRONG	PA17	5112
37005246300000	-79.4309	40.8502	28	28	1070	18	PA	ARMSTRONG	PA17	4894
37005246320000	-79.4329	40.8479	28	29	1082	18	PA	ARMSTRONG	PA17	4924
37005246330000	-79.4657	40.7978	31	32	1103	20	PA	ARMSTRONG	PA17	5077
37005246420000	-79.4669	40.7838	32	32	1091	21	PA	ARMSTRONG	PA17	5081
37005246540000	-79.4728	40.7919	28	30	1155	17	PA	ARMSTRONG	PA17	5068
37005246550000	-79.4596	40.7898	32	33	1128	21	PA	ARMSTRONG	PA17	5131
37005246560000	-79.2396	40.8370	34	35	1135	22	PA	ARMSTRONG	PA17	5582
37005246570000	-79.5227	40.6558	32	34	1209	19	PA	ARMSTRONG	PA17	5669
37005246600000	-79.5338	40.7432	29	27	891	22	PA	ARMSTRONG	PA17	5043
37005246630000	-79.4459	40.8228	31	31	1042	21	PA	ARMSTRONG	PA17	5014
37005246710000	-79.5360	40.7396	32	33	1141	20	PA	ARMSTRONG	PA17	5022
37005246740000	-79.5136	40.7582	26	24	902	18	PA	ARMSTRONG	PA17	5101
37005246760000	-79.4078	40.7516	33	35	1137	21	PA	ARMSTRONG	PA17	5400
37005246820000	-79.2843	40.9901	30	31	1154	18	PA	ARMSTRONG	PA17	4692
37005246830000	-79.3750	40.7767	30	28	924	23	PA	ARMSTRONG	PA17	5617
37005246910000	-79.5386	40.6559	26	24	917	19	PA	ARMSTRONG	PA17	5603
37005246920000	-79.4640	40.8412	31	32	1112	20	PA	ARMSTRONG	PA17	4811
37005246930000	-79.2998	41.0006	27	27	1048	17	PA	ARMSTRONG	PA17	4574
37005246940000	-79.3062	40.9151	37	37	1038	27	PA	ARMSTRONG	PA17	5056
37005246980000	-79.4760	40.7917	28	29	1105	17	PA	ARMSTRONG	PA17	5056
37005247030000	-79.3997	40.9047	30	31	1120	19	PA	ARMSTRONG	PA17	4655
37005247040000	-79.4612	40.8129	31	31	1052	20	PA	ARMSTRONG	PA17	4922

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005247070000	-79.5586	40.6729	34	36	1212	21	PA	ARMSTRONG	PA17	5632
37005247090000	-79.5633	40.6733	29	31	1172	17	PA	ARMSTRONG	PA17	5614
37005247100000	-79.3645	40.9139	31	32	1081	20	PA	ARMSTRONG	PA17	4774
37005247120000	-79.4522	40.7897	27	28	1131	16	PA	ARMSTRONG	PA17	5135
37005247190000	-79.4338	40.8111	28	29	1124	17	PA	ARMSTRONG	PA17	5163
37005247210000	-79.4046	40.7430	31	32	1136	19	PA	ARMSTRONG	PA17	5471
37005247220000	-79.4382	40.8536	31	31	1063	20	PA	ARMSTRONG	PA17	4830
37005247230000	-79.4238	40.8605	29	30	1093	19	PA	ARMSTRONG	PA17	4821
37005247240000	-79.4281	40.8533	29	29	1045	20	PA	ARMSTRONG	PA17	4833
37005247250000	-79.4320	40.8540	31	31	1044	21	PA	ARMSTRONG	PA17	4812
37005247300000	-79.4818	40.7895	26	27	1116	15	PA	ARMSTRONG	PA17	5030
37005247310000	-79.4336	40.8080	26	26	1097	15	PA	ARMSTRONG	PA17	5135
37005247370000	-79.4231	40.7162	29	31	1143	18	PA	ARMSTRONG	PA17	5645
37005247390000	-79.4615	40.9586	32	33	1088	21	PA	ARMSTRONG	PA17	4617
37005247400000	-79.5238	40.6643	29	31	1168	17	PA	ARMSTRONG	PA17	5638
37005247450000	-79.4541	40.8574	24	25	1117	13	PA	ARMSTRONG	PA17	4841
37005247470000	-79.5299	40.6481	24	23	955	16	PA	ARMSTRONG	PA17	5611
37005247480000	-79.5262	40.6492	24	24	1008	15	PA	ARMSTRONG	PA17	5633
37005247550000	-79.4151	40.8816	29	30	1100	18	PA	ARMSTRONG	PA17	4669
37005247570000	-79.2926	40.9995	27	27	1087	16	PA	ARMSTRONG	PA17	4613
37005247580000	-79.2476	41.0022	31	32	1117	19	PA	ARMSTRONG	PA17	4799
37005247600000	-79.4675	40.7803	35	36	1143	23	PA	ARMSTRONG	PA17	5135
37005247630000	-79.4407	40.8151	25	21	758	21	PA	ARMSTRONG	PA17	5064
37005247650000	-79.4040	40.8194	26	24	914	18	PA	ARMSTRONG	PA17	5221
37005247670000	-79.2888	40.9992	27	27	1076	16	PA	ARMSTRONG	PA17	4632
37005247680000	-79.2913	40.9969	25	26	1105	14	PA	ARMSTRONG	PA17	4649
37005247690000	-79.2924	40.9923	30	31	1084	19	PA	ARMSTRONG	PA17	4629
37005247700000	-79.3148	40.9667	30	30	1054	20	PA	ARMSTRONG	PA17	4818
37005247790000	-79.3485	40.7863	28	28	1097	17	PA	ARMSTRONG	PA17	5552
37005247800000	-79.5126	40.6613	35	37	1158	22	PA	ARMSTRONG	PA17	5615
37005247820000	-79.3577	40.7438	31	32	1130	20	PA	ARMSTRONG	PA17	5621
37005247870000	-79.4348	40.8507	29	29	1061	19	PA	ARMSTRONG	PA17	4866
37005247930000	-79.4551	40.8076	29	30	1109	18	PA	ARMSTRONG	PA17	5119
37005248000000	-79.4233	40.8633	28	29	1099	18	PA	ARMSTRONG	PA17	4791
37005248020000	-79.6223	40.6525	28	29	1116	17	PA	ARMSTRONG	PA17	5512
37005248030000	-79.4326	40.7985	31	33	1180	19	PA	ARMSTRONG	PA17	5197
37005248130000	-79.4611	40.7930	28	29	1131	17	PA	ARMSTRONG	PA17	5159
37005248180000	-79.4058	40.7385	29	30	1119	18	PA	ARMSTRONG	PA17	5495
37005248240000	-79.5415	40.7434	31	31	1062	21	PA	ARMSTRONG	PA17	4985

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005248310000	-79.2906	41.0019	31	32	1084	20	PA	ARMSTRONG	PA17	4639
37005248350000	-79.5201	40.6588	36	38	1216	22	PA	ARMSTRONG	PA17	5665
37005248410000	-79.5262	40.7337	29	30	1082	19	PA	ARMSTRONG	PA17	5116
37005248450000	-79.4262	40.8650	31	31	1099	20	PA	ARMSTRONG	PA17	4771
37005248510000	-79.5155	40.6580	30	32	1172	18	PA	ARMSTRONG	PA17	5615
37005248530000	-79.4383	40.8089	28	29	1101	17	PA	ARMSTRONG	PA17	5126
37005248540000	-79.3920	40.9234	32	33	1146	20	PA	ARMSTRONG	PA17	4660
37005248550000	-79.3826	40.7915	27	28	1113	16	PA	ARMSTRONG	PA17	5546
37005248560000	-79.2852	40.9991	27	27	1090	16	PA	ARMSTRONG	PA17	4631
37005248570000	-79.2833	40.9963	28	29	1110	17	PA	ARMSTRONG	PA17	4667
37005248580000	-79.4319	40.8591	32	32	1062	22	PA	ARMSTRONG	PA17	4803
37005248590000	-79.2880	41.0041	33	33	1072	22	PA	ARMSTRONG	PA17	4609
37005248630000	-79.2724	40.9724	28	29	1130	17	PA	ARMSTRONG	PA17	4824
37005248640000	-79.4313	40.8063	31	32	1135	19	PA	ARMSTRONG	PA17	5162
37005248670000	-79.5201	40.6645	36	38	1170	23	PA	ARMSTRONG	PA17	5632
37005248740000	-79.3929	40.8188	31	31	1056	21	PA	ARMSTRONG	PA17	5263
37005248750000	-79.4478	40.8563	34	34	1042	24	PA	ARMSTRONG	PA17	4778
37005248760000	-79.4488	40.8071	27	27	1104	16	PA	ARMSTRONG	PA17	5164
37005248780000	-79.5326	40.8629	26	26	1045	16	PA	ARMSTRONG	PA17	4655
37005248800000	-79.4283	40.8622	29	30	1076	19	PA	ARMSTRONG	PA17	4783
37005248810000	-79.4315	40.8639	29	30	1098	18	PA	ARMSTRONG	PA17	4779
37005248840000	-79.4422	40.8605	28	28	1088	17	PA	ARMSTRONG	PA17	4742
37005248850000	-79.5059	40.8586	30	30	1009	21	PA	ARMSTRONG	PA17	4563
37005248860000	-79.4661	40.8181	34	35	1122	23	PA	ARMSTRONG	PA17	4867
37005248890000	-79.4786	40.7866	28	28	1071	18	PA	ARMSTRONG	PA17	5032
37005248930000	-79.4617	40.8154	28	29	1108	17	PA	ARMSTRONG	PA17	4944
37005248940000	-79.4322	40.7922	30	32	1174	18	PA	ARMSTRONG	PA17	5147
37005248960000	-79.4398	40.8629	36	37	1131	24	PA	ARMSTRONG	PA17	4755
37005248970000	-79.4654	40.8155	31	32	1143	19	PA	ARMSTRONG	PA17	4922
37005248980000	-79.4602	40.8576	33	34	1135	21	PA	ARMSTRONG	PA17	4824
37005249020000	-79.5147	40.8563	31	30	1003	21	PA	ARMSTRONG	PA17	4552
37005249040000	-79.5231	40.8631	28	29	1098	18	PA	ARMSTRONG	PA17	4649
37005249060000	-79.4595	40.8546	28	29	1134	17	PA	ARMSTRONG	PA17	4842
37005249070000	-79.4395	40.8059	26	26	1094	15	PA	ARMSTRONG	PA17	5163
37005249090000	-79.5119	40.7429	29	27	917	22	PA	ARMSTRONG	PA17	5202
37005249170000	-79.2971	41.0031	33	34	1111	22	PA	ARMSTRONG	PA17	4545
37005249330000	-79.5272	40.7361	26	26	1006	17	PA	ARMSTRONG	PA17	5092
37005249360000	-79.2833	40.9816	29	29	1101	18	PA	ARMSTRONG	PA17	4719
37005249430000	-79.5109	40.8601	28	27	953	20	PA	ARMSTRONG	PA17	4518

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005249440000	-79.4753	40.7843	29	29	1080	18	PA	ARMSTRONG	PA17	5072
37005249480000	-79.5408	40.7407	33	34	1057	23	PA	ARMSTRONG	PA17	5000
37005249520000	-79.4003	40.8059	29	26	849	23	PA	ARMSTRONG	PA17	5309
37005249630000	-79.5408	40.7459	30	30	1029	20	PA	ARMSTRONG	PA17	4977
37005249640000	-79.3002	40.9045	23	21	840	17	PA	ARMSTRONG	PA17	5108
37005249650000	-79.4537	40.8054	33	33	1038	23	PA	ARMSTRONG	PA17	5061
37005249670000	-79.5037	40.7449	26	24	917	19	PA	ARMSTRONG	PA17	5240
37005249710000	-79.2658	40.9929	27	26	977	18	PA	ARMSTRONG	PA17	4695
37005249720000	-79.3761	40.9001	29	30	1109	18	PA	ARMSTRONG	PA17	4808
37005249750000	-79.2906	41.0047	29	29	1055	19	PA	ARMSTRONG	PA17	4561
37005249760000	-79.5164	40.6636	31	32	1173	18	PA	ARMSTRONG	PA17	5635
37005249770000	-79.4362	40.8462	39	45	1513	20	PA	ARMSTRONG	PA17	4952
37005249780000	-79.4823	40.7771	32	32	1085	21	PA	ARMSTRONG	PA17	5098
37005249830000	-79.5950	40.8900	21	18	834	15	PA	ARMSTRONG	PA17	4705
37005249870000	-79.3328	40.9534	26	25	997	17	PA	ARMSTRONG	PA17	4886
37005249890000	-79.4852	40.7755	29	30	1062	19	PA	ARMSTRONG	PA17	5068
37005249900000	-79.2415	40.9482	31	31	1097	20	PA	ARMSTRONG	PA17	5206
37005249910000	-79.4824	40.7737	27	27	1058	17	PA	ARMSTRONG	PA17	5095
37005249930000	-79.4460	40.8591	31	32	1082	20	PA	ARMSTRONG	PA17	4748
37005249940000	-79.4744	40.8193	31	31	1098	20	PA	ARMSTRONG	PA17	4747
37005249970000	-79.5322	40.7400	28	27	1013	19	PA	ARMSTRONG	PA17	5062
37005250030000	-79.3335	40.9507	24	24	1007	15	PA	ARMSTRONG	PA17	4909
37005250040000	-79.3949	40.9095	28	29	1121	17	PA	ARMSTRONG	PA17	4630
37005250100000	-79.3887	40.7423	30	31	1142	18	PA	ARMSTRONG	PA17	5539
37005250140000	-79.5114	40.7461	31	30	951	23	PA	ARMSTRONG	PA17	5173
37005250250000	-79.2764	40.9976	26	26	1055	16	PA	ARMSTRONG	PA17	4628
37005250260000	-79.2798	40.9995	29	30	1123	18	PA	ARMSTRONG	PA17	4652
37005250340000	-79.3452	40.9258	25	23	927	17	PA	ARMSTRONG	PA17	4881
37005250350000	-79.5057	40.6674	29	31	1125	18	PA	ARMSTRONG	PA17	5570
37005250370000	-79.3089	40.9517	26	23	887	19	PA	ARMSTRONG	PA17	4852
37005250380000	-79.2583	40.8333	33	35	1180	21	PA	ARMSTRONG	PA17	5649
37005250410000	-79.3213	40.9830	31	31	1101	20	PA	ARMSTRONG	PA17	4722
37005250420000	-79.3250	40.9846	29	30	1056	19	PA	ARMSTRONG	PA17	4698
37005250430000	-79.5002	40.7783	28	28	1077	17	PA	ARMSTRONG	PA17	5085
37005250470000	-79.2601	40.8391	32	34	1188	19	PA	ARMSTRONG	PA17	5596
37005250480000	-79.2561	40.8213	30	31	1117	19	PA	ARMSTRONG	PA17	5717
37005250490000	-79.2801	41.0093	29	29	1026	19	PA	ARMSTRONG	PA17	4561
37005250540000	-79.5458	40.7385	31	30	1039	21	PA	ARMSTRONG	PA17	5036
37005250570000	-79.3627	40.9176	32	33	1117	21	PA	ARMSTRONG	PA17	4797

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005250580000	-79.4499	40.8045	30	31	1087	19	PA	ARMSTRONG	PA17	5136
37005250610000	-79.5593	40.7275	24	23	931	17	PA	ARMSTRONG	PA17	5115
37005250640000	-79.3048	40.9892	31	32	1102	20	PA	ARMSTRONG	PA17	4689
37005250660000	-79.3704	40.9312	26	26	1010	17	PA	ARMSTRONG	PA17	4601
37005250730000	-79.4621	40.8100	26	26	1059	16	PA	ARMSTRONG	PA17	4939
37005250740000	-79.3564	40.9980	27	26	931	20	PA	ARMSTRONG	PA17	4590
37005250760000	-79.3722	40.9368	28	28	995	19	PA	ARMSTRONG	PA17	4553
37005250770000	-79.4356	40.8582	32	32	1053	22	PA	ARMSTRONG	PA17	4791
37005250810000	-79.2896	41.0072	27	27	1043	17	PA	ARMSTRONG	PA17	4547
37005250880000	-79.4033	40.7277	29	30	1142	17	PA	ARMSTRONG	PA17	5588
37005251170000	-79.3378	40.7773	28	29	1138	17	PA	ARMSTRONG	PA17	5628
37005251190000	-79.5476	40.7456	28	27	980	20	PA	ARMSTRONG	PA17	5014
37005251590000	-79.2861	40.8115	25	26	1122	14	PA	ARMSTRONG	PA17	5659
37005251610000	-79.2736	40.8210	29	31	1152	18	PA	ARMSTRONG	PA17	5683
37005251860000	-79.2808	40.8074	31	32	1147	19	PA	ARMSTRONG	PA17	5647
37005252060000	-79.2731	40.8311	30	31	1123	19	PA	ARMSTRONG	PA17	5622
37005252150000	-79.5413	40.7363	30	31	1098	19	PA	ARMSTRONG	PA17	5041
37005252160000	-79.2853	41.0018	29	30	1058	19	PA	ARMSTRONG	PA17	4604
37005252820000	-79.4841	40.7687	27	27	1092	16	PA	ARMSTRONG	PA17	5162
37005253170000	-79.4867	40.7506	27	28	1117	16	PA	ARMSTRONG	PA17	5344
37005253180000	-79.4881	40.7475	28	29	1084	18	PA	ARMSTRONG	PA17	5357
37005253300000	-79.4333	40.7400	28	29	1113	17	PA	ARMSTRONG	PA17	5544
37005253710000	-79.2190	41.0330	22	18	796	16	PA	ARMSTRONG	PA17	4716
37005253730000	-79.2673	40.9792	31	31	1063	20	PA	ARMSTRONG	PA17	4786
37005253850000	-79.4670	40.7889	27	28	1127	16	PA	ARMSTRONG	PA17	5136
37005254640000	-79.2254	41.0371	27	24	838	21	PA	ARMSTRONG	PA17	4698
37005254660000	-79.2637	40.8511	31	32	1139	19	PA	ARMSTRONG	PA17	5475
37005254700000	-79.3480	40.8896	29	27	920	22	PA	ARMSTRONG	PA17	5068
37005254810000	-79.2735	40.8160	29	31	1145	18	PA	ARMSTRONG	PA17	5682
37005254850000	-79.2430	40.8419	31	33	1162	19	PA	ARMSTRONG	PA17	5556
37005255060000	-79.2450	40.9788	29	29	1036	19	PA	ARMSTRONG	PA17	5012
37005255710000	-79.4325	40.7449	27	27	1073	16	PA	ARMSTRONG	PA17	5453
37005256330000	-79.4032	40.8659	29	30	1056	19	PA	ARMSTRONG	PA17	4826
37005257230000	-79.4654	40.7864	30	31	1127	19	PA	ARMSTRONG	PA17	5123
37005257680000	-79.2615	40.8360	32	33	1131	21	PA	ARMSTRONG	PA17	5621
37005257880000	-79.4209	40.8590	30	30	1054	20	PA	ARMSTRONG	PA17	4803
37005258600000	-79.4909	40.7507	31	31	1114	19	PA	ARMSTRONG	PA17	5307
37005260530000	-79.2445	40.8458	28	30	1138	17	PA	ARMSTRONG	PA17	5493
37005261700000	-79.2414	40.8449	28	30	1141	17	PA	ARMSTRONG	PA17	5502

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005261970000	-79.3344	40.8631	28	29	1102	17	PA	ARMSTRONG	PA17	5157
37005263810000	-79.4076	40.8062	28	27	977	20	PA	ARMSTRONG	PA17	5264
37005265830000	-79.5621	40.6813	29	29	1040	19	PA	ARMSTRONG	PA17	5577
37005267090000	-79.3293	40.8242	26	26	1077	15	PA	ARMSTRONG	PA17	5157
37005267700000	-79.2672	40.9221	28	28	1023	19	PA	ARMSTRONG	PA17	5199
37005268680000	-79.3321	40.8820	30	30	1042	20	PA	ARMSTRONG	PA17	5143
37005269050000	-79.3502	40.9834	28	28	1040	19	PA	ARMSTRONG	PA17	4671
37005269060000	-79.3126	40.9963	28	28	1059	18	PA	ARMSTRONG	PA17	4667
37005269500000	-79.3321	40.8771	29	29	1083	18	PA	ARMSTRONG	PA17	5183
37005269760000	-79.3422	40.8745	28	28	1034	18	PA	ARMSTRONG	PA17	5112
37005270490000	-79.3401	40.9836	24	19	671	22	PA	ARMSTRONG	PA17	4908
37005270550000	-79.2710	40.9250	28	27	978	19	PA	ARMSTRONG	PA17	5223
37005270630000	-79.3459	40.9809	27	25	917	20	PA	ARMSTRONG	PA17	4658
37005270640000	-79.3448	40.9839	27	25	890	20	PA	ARMSTRONG	PA17	4661
37005271990000	-79.3412	40.9769	25	23	917	17	PA	ARMSTRONG	PA17	4717
37005272000000	-79.3373	40.9816	27	25	892	20	PA	ARMSTRONG	PA17	4674
37005272430000	-79.3586	40.9844	27	26	936	19	PA	ARMSTRONG	PA17	4690
37005272440000	-79.3602	40.9877	28	28	1045	18	PA	ARMSTRONG	PA17	4677
37005272820000	-79.4684	40.8479	29	30	1092	19	PA	ARMSTRONG	PA17	4719
37005273500000	-79.2288	40.9516	28	28	1047	18	PA	ARMSTRONG	PA17	5218
37005282020000	-79.4134	40.8559	28	28	1023	19	PA	ARMSTRONG	PA17	4834
37005284370000	-79.6121	40.7213	28	27	990	19	PA	ARMSTRONG	PA17	5212
37005300370000	-79.5594	40.8563	41	49	1763	18	PA	ARMSTRONG	PA17	4633
37019200110000	-80.0453	40.8917	34	42	1695	15	PA	BUTLER	PA17	1511
37019200500000	-79.7639	40.7149	26	24	906	18	PA	BUTLER	PA17	5562
37019200650000	-79.7529	41.0737	21	17	723	17	PA	BUTLER	PA17	4926
37019201010000	-79.7039	40.8473	24	21	797	19	PA	BUTLER	PA17	5610
37019205240000	-79.9757	40.9046	35	35	1038	25	PA	BUTLER	PA17	5028
37019213050000	-79.9654	40.9637	59	67	1701	29	PA	BUTLER	PA17	2115
37021200030000	-78.6187	40.7075	76	90	2509	27	PA	CAMBRIA	PA17	7503
37021200040000	-78.8084	40.4079	73	89	2729	24	PA	CAMBRIA	PA17	7430
37021200130000	-78.8495	40.3155	65	82	2922	19	PA	CAMBRIA	PA17	7441
37021200140000	-78.7059	40.6310	68	83	2579	23	PA	CAMBRIA	PA17	7487
37021200150000	-78.8169	40.5099	52	68	2632	16	PA	CAMBRIA	PA17	7455
37021200160000	-78.7159	40.6214	41	42	1141	28	PA	CAMBRIA	PA17	7474
37021200170000	-78.8301	40.4970	66	81	2595	22	PA	CAMBRIA	PA17	7415
37021200220000	-78.7371	40.5989	52	67	2539	17	PA	CAMBRIA	PA17	7420
37021200280000	-78.7901	40.5282	43	58	2530	14	PA	CAMBRIA	PA17	7438
37021200310000	-78.6601	40.6722	86	101	2515	31	PA	CAMBRIA	PA17	7395

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37021200330000	-78.8162	40.4405	42	49	1656	20	PA	CAMBRIA	PA17	7455
37021200490000	-78.8186	40.4045	33	35	1224	19	PA	CAMBRIA	PA17	7407
37021200500000	-78.7710	40.4094	73	90	2812	23	PA	CAMBRIA	PA17	7620
37021200950000	-78.6944	40.2463	61	77	2802	19	PA	CAMBRIA	PA17	7616
37021201520000	-78.6225	40.7042	32	33	1127	21	PA	CAMBRIA	PA17	7559
37021202020000	-78.6439	40.7033	25	26	1125	14	PA	CAMBRIA	PA17	7550
37021202460000	-78.6466	40.7005	28	29	1105	17	PA	CAMBRIA	PA17	7510
37021202480000	-78.6331	40.7004	29	31	1144	18	PA	CAMBRIA	PA17	7571
37021203000000	-78.6808	40.7001	32	31	1029	22	PA	CAMBRIA	PA17	7307
37021203130000	-78.7326	40.6496	32	33	1120	20	PA	CAMBRIA	PA17	7629
37021203630000	-78.7258	40.6466	30	30	1054	20	PA	CAMBRIA	PA17	7588
37021203660000	-78.7244	40.6440	27	28	1096	17	PA	CAMBRIA	PA17	7609
37021203820000	-78.7116	40.6524	31	33	1163	19	PA	CAMBRIA	PA17	7535
37021204860000	-78.5121	40.7146	34	36	1182	21	PA	CAMBRIA	PA17	7248
37021205720000	-78.7070	40.6573	31	32	1130	19	PA	CAMBRIA	PA17	7499
37021206140000	-78.8172	40.6644	34	35	1127	22	PA	CAMBRIA	PA17	7787
37021207810000	-78.5673	40.7249	30	31	1129	19	PA	CAMBRIA	PA17	7344
37021207880000	-78.7689	40.4974	73	89	2771	23	PA	CAMBRIA	PA17	7433
37021207910000	-78.8013	40.4024	64	80	2683	21	PA	CAMBRIA	PA17	7462
37021208140000	-78.7201	40.5788	28	26	899	21	PA	CAMBRIA	PA17	7391
37021208190000	-78.6300	40.5318	46	56	1913	19	PA	CAMBRIA	PA17	7349
37021208200000	-78.6286	40.5813	41	51	1963	16	PA	CAMBRIA	PA17	7363
37021208210000	-78.5701	40.6159	41	51	1969	16	PA	CAMBRIA	PA17	7271
37021208230000	-78.7903	40.4129	64	80	2707	20	PA	CAMBRIA	PA17	7478
37021208260000	-78.5817	40.7149	26	23	854	20	PA	CAMBRIA	PA17	7386
37021208280000	-78.6329	40.5295	49	59	1934	21	PA	CAMBRIA	PA17	7368
37021208320000	-78.6629	40.5231	51	61	1928	22	PA	CAMBRIA	PA17	7373
37021208340000	-78.6242	40.5322	48	58	1922	20	PA	CAMBRIA	PA17	7318
37021208420000	-78.7735	40.4024	56	72	2746	17	PA	CAMBRIA	PA17	7577
37021208450000	-78.8295	40.3801	59	74	2569	19	PA	CAMBRIA	PA17	7318
37021209380000	-78.6310	40.5364	41	50	1882	17	PA	CAMBRIA	PA17	7361
37031201410000	-79.3512	41.2593	25	22	809	20	PA	CLARION	PA17	4198
37031201680000	-79.3703	41.1916	69	83	2410	25	PA	CLARION	PA17	4209
37031201850000	-79.3580	41.2108	60	68	1762	29	PA	CLARION	PA17	4174
37031201940000	-79.3975	41.1938	52	60	1771	24	PA	CLARION	PA17	4208
37031202470000	-79.4944	41.1584	53	61	1700	26	PA	CLARION	PA17	4142
37031202610000	-79.2801	41.0724	55	65	1954	24	PA	CLARION	PA17	4640
37031204310000	-79.2327	41.3315	55	63	1708	27	PA	CLARION	PA17	4268
37031205540000	-79.3727	41.3576	29	27	919	22	PA	CLARION	PA17	4303

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37031205920000	-79.5913	41.2113	56	69	2266	21	PA	CLARION	PA17	3482
37031207510000	-79.2659	41.3984	48	61	2229	18	PA	CLARION	PA17	4245
37031231970000	-79.2144	41.1671	32	40	1676	14	PA	CLARION	PA17	4712
37031236050000	-79.2967	41.0315	26	25	1003	16	PA	CLARION	PA17	4642
37031236210000	-79.2865	41.0305	28	28	1036	19	PA	CLARION	PA17	4672
37031236410000	-79.2771	41.1903	26	25	950	18	PA	CLARION	PA17	4158
37031236460000	-79.2986	41.0246	27	27	991	18	PA	CLARION	PA17	4606
37031236520000	-79.2900	41.0315	29	29	997	21	PA	CLARION	PA17	4636
37031236550000	-79.2874	41.0277	29	29	1020	20	PA	CLARION	PA17	4648
37031236640000	-79.3002	41.0305	29	29	981	21	PA	CLARION	PA17	4621
37031236650000	-79.2973	41.0287	28	27	966	19	PA	CLARION	PA17	4598
37031236880000	-79.2963	41.0224	28	27	972	20	PA	CLARION	PA17	4585
37031237060000	-79.5837	41.0704	29	30	1056	19	PA	CLARION	PA17	4345
37031237250000	-79.4598	41.0323	24	22	869	18	PA	CLARION	PA17	4283
37031237290000	-79.3552	41.0811	24	22	841	18	PA	CLARION	PA17	4595
37031237360000	-79.3613	41.0750	26	23	849	20	PA	CLARION	PA17	4599
37031237370000	-79.2915	41.0259	36	42	1532	17	PA	CLARION	PA17	4623
37031237400000	-79.3318	41.0595	27	25	903	20	PA	CLARION	PA17	4710
37031240530000	-79.3567	41.0300	28	28	1024	19	PA	CLARION	PA17	4675
37033000930000	-78.6899	41.0724	78	90	2156	32	PA	CLEARFIELD	PA17	5639
37033200390000	-78.3440	41.0452	74	88	2396	27	PA	CLEARFIELD	PA17	6112
37033200650000	-78.4541	41.2012	70	82	2137	28	PA	CLEARFIELD	PA17	5840
37033200800000	-78.3950	41.2212	53	62	1768	25	PA	CLEARFIELD	PA17	5710
37033200900000	-78.6542	41.1069	32	31	975	24	PA	CLEARFIELD	PA17	5679
37033200920000	-78.6440	41.1010	66	78	2193	26	PA	CLEARFIELD	PA17	5202
37033201850000	-78.5507	41.1883	63	76	2232	24	PA	CLEARFIELD	PA17	5725
37033203250000	-78.7453	41.0779	77	90	2316	29	PA	CLEARFIELD	PA17	5317
37033203260000	-78.7707	41.0708	31	31	1088	20	PA	CLEARFIELD	PA17	5322
37033203320000	-78.7598	41.0733	35	36	1094	24	PA	CLEARFIELD	PA17	5329
37033203560000	-78.4398	40.8643	78	93	2481	28	PA	CLEARFIELD	PA17	6269
37033203590000	-78.7652	41.1055	76	88	2213	30	PA	CLEARFIELD	PA17	5146
37033203630000	-78.3464	40.9570	67	81	2461	23	PA	CLEARFIELD	PA17	6310
37033203660000	-78.3237	40.9528	64	78	2422	23	PA	CLEARFIELD	PA17	6324
37033203770000	-78.6685	41.1759	82	95	2270	32	PA	CLEARFIELD	PA17	5348
37033203820000	-78.5259	41.0019	73	87	2313	28	PA	CLEARFIELD	PA17	5738
37033205080000	-78.3083	40.9353	59	73	2448	20	PA	CLEARFIELD	PA17	6345
37033205370000	-78.2781	40.9463	60	75	2504	20	PA	CLEARFIELD	PA17	6343
37033205380000	-78.3273	40.9205	61	75	2458	21	PA	CLEARFIELD	PA17	6323
37033205710000	-78.7227	40.9917	68	81	2273	26	PA	CLEARFIELD	PA17	6163

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37033205820000	-78.6812	41.1658	69	83	2305	26	PA	CLEARFIELD	PA17	5283
37033205860000	-78.7297	40.9867	68	81	2272	26	PA	CLEARFIELD	PA17	6223
37033205870000	-78.6942	40.9981	63	77	2374	23	PA	CLEARFIELD	PA17	5876
37033206070000	-78.7248	41.0038	54	68	2298	20	PA	CLEARFIELD	PA17	6052
37033206090000	-78.6374	41.2488	61	72	2035	26	PA	CLEARFIELD	PA17	5454
37033206200000	-78.3025	40.9225	68	82	2441	24	PA	CLEARFIELD	PA17	6336
37033206340000	-78.3208	40.9307	63	78	2462	22	PA	CLEARFIELD	PA17	6355
37033206510000	-78.7446	41.0278	73	86	2205	29	PA	CLEARFIELD	PA17	5763
37033206540000	-78.7149	40.9971	62	75	2314	23	PA	CLEARFIELD	PA17	6052
37033207030000	-78.7212	41.0290	76	89	2213	30	PA	CLEARFIELD	PA17	5784
37033207050000	-78.7007	41.0131	58	72	2356	21	PA	CLEARFIELD	PA17	5918
37033207670000	-78.3145	40.9229	64	79	2505	22	PA	CLEARFIELD	PA17	6363
37033209170000	-78.3184	40.9377	68	82	2495	24	PA	CLEARFIELD	PA17	6385
37033209700000	-78.3252	41.0056	62	76	2425	22	PA	CLEARFIELD	PA17	6236
37033211790000	-78.3238	40.9123	70	85	2575	24	PA	CLEARFIELD	PA17	6313
37033212120000	-78.5091	41.0629	75	88	2278	29	PA	CLEARFIELD	PA17	5908
37033212920000	-78.7938	41.0715	62	75	2211	24	PA	CLEARFIELD	PA17	5362
37033213960000	-78.3087	41.1664	54	67	2244	20	PA	CLEARFIELD	PA17	6074
37033214460000	-78.3018	40.9490	60	74	2441	21	PA	CLEARFIELD	PA17	6307
37033216340000	-78.3095	41.1721	52	65	2316	19	PA	CLEARFIELD	PA17	6088
37033217390000	-78.3173	41.1717	69	83	2308	26	PA	CLEARFIELD	PA17	6058
37033218780000	-78.5182	41.0630	60	73	2242	23	PA	CLEARFIELD	PA17	5927
37033219230000	-78.3213	41.1656	66	79	2307	25	PA	CLEARFIELD	PA17	6098
37033220140000	-78.3151	41.1630	63	76	2321	23	PA	CLEARFIELD	PA17	6135
37033222790000	-78.2987	41.1718	60	73	2300	22	PA	CLEARFIELD	PA17	6125
37033222800000	-78.3002	41.1661	60	73	2279	22	PA	CLEARFIELD	PA17	6150
37033222810000	-78.3361	41.1580	61	74	2335	22	PA	CLEARFIELD	PA17	6104
37033223770000	-78.3582	41.1513	61	74	2331	22	PA	CLEARFIELD	PA17	5942
37033224630000	-78.3278	41.1711	66	79	2292	25	PA	CLEARFIELD	PA17	6068
37033225030000	-78.5523	41.0197	32	31	981	24	PA	CLEARFIELD	PA17	5855
37033228780000	-78.5036	40.8403	59	73	2512	20	PA	CLEARFIELD	PA17	6518
37033230220000	-78.4921	41.2056	52	64	2183	20	PA	CLEARFIELD	PA17	5769
37033230960000	-78.3135	40.9970	54	68	2394	19	PA	CLEARFIELD	PA17	6257
37033231720000	-78.3325	40.9288	57	72	2516	19	PA	CLEARFIELD	PA17	6353
37033232400000	-78.7723	41.0815	54	67	2264	20	PA	CLEARFIELD	PA17	5304
37033232450000	-78.3106	40.8985	57	72	2509	19	PA	CLEARFIELD	PA17	6317
37033235980000	-78.5127	40.7990	42	49	1676	20	PA	CLEARFIELD	PA17	6948
37033236480000	-78.7344	41.0848	29	29	1067	19	PA	CLEARFIELD	PA17	4802
37033236960000	-78.7059	41.1019	27	27	1037	18	PA	CLEARFIELD	PA17	4872

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37033236970000	-78.7023	41.1007	32	32	1041	22	PA	CLEARFIELD	PA17	4900
37033237100000	-78.7035	41.0937	27	27	1007	18	PA	CLEARFIELD	PA17	4926
37033240800000	-78.3106	41.1767	48	61	2346	17	PA	CLEARFIELD	PA17	6059
37033249330000	-78.6809	40.9729	28	30	1159	17	PA	CLEARFIELD	PA17	5368
37033249440000	-78.6869	40.9632	26	25	1009	16	PA	CLEARFIELD	PA17	5521
37033249450000	-78.6845	40.9653	28	28	1028	19	PA	CLEARFIELD	PA17	5479
37033249480000	-78.6728	40.9274	31	31	1048	21	PA	CLEARFIELD	PA17	5712
37033249730000	-78.6817	40.9675	28	28	1046	18	PA	CLEARFIELD	PA17	5434
37033249830000	-78.6848	40.9581	27	26	1010	17	PA	CLEARFIELD	PA17	5568
37033250160000	-78.7445	40.9650	25	24	938	17	PA	CLEARFIELD	PA17	6218
37033250180000	-78.7398	40.9679	24	24	983	16	PA	CLEARFIELD	PA17	6127
37033250250000	-78.7286	40.9619	27	26	974	18	PA	CLEARFIELD	PA17	6177
37033250570000	-78.7043	40.9402	28	28	1004	19	PA	CLEARFIELD	PA17	6061
37033250610000	-78.7125	40.9589	29	29	977	21	PA	CLEARFIELD	PA17	6022
37033251190000	-78.7139	40.9491	29	28	966	21	PA	CLEARFIELD	PA17	6181
37033251240000	-78.7420	40.9691	27	26	937	19	PA	CLEARFIELD	PA17	6108
37033251250000	-78.7361	40.9719	27	26	935	19	PA	CLEARFIELD	PA17	6003
37033251430000	-78.7339	40.9766	28	27	940	21	PA	CLEARFIELD	PA17	5884
37033251460000	-78.7349	40.9787	27	26	931	20	PA	CLEARFIELD	PA17	5850
37033251520000	-78.7169	40.9647	27	25	908	20	PA	CLEARFIELD	PA17	5986
37033251670000	-78.6555	40.9294	29	29	1018	20	PA	CLEARFIELD	PA17	5491
37033251780000	-78.6802	40.9714	29	29	1046	19	PA	CLEARFIELD	PA17	5382
37033251790000	-78.7145	40.9747	28	28	992	19	PA	CLEARFIELD	PA17	5736
37033251810000	-78.7094	40.9648	27	25	928	19	PA	CLEARFIELD	PA17	5870
37033251830000	-78.7283	40.9698	27	26	945	19	PA	CLEARFIELD	PA17	5986
37033251840000	-78.7317	40.9676	28	27	991	19	PA	CLEARFIELD	PA17	6068
37033251850000	-78.7258	40.9706	29	28	965	21	PA	CLEARFIELD	PA17	5944
37033251870000	-78.7117	40.9772	28	27	987	19	PA	CLEARFIELD	PA17	5652
37033251880000	-78.7086	40.9770	29	29	1033	20	PA	CLEARFIELD	PA17	5622
37033251900000	-78.7299	40.9710	26	25	974	18	PA	CLEARFIELD	PA17	5973
37033251920000	-78.7282	40.9646	28	27	965	19	PA	CLEARFIELD	PA17	6111
37033252010000	-78.7176	40.9680	27	25	909	19	PA	CLEARFIELD	PA17	5920
37033252140000	-78.7280	40.9679	27	26	982	18	PA	CLEARFIELD	PA17	6029
37033252150000	-78.7261	40.9673	30	29	992	21	PA	CLEARFIELD	PA17	6025
37033252160000	-78.7239	40.9667	24	23	958	16	PA	CLEARFIELD	PA17	6020
37033252250000	-78.7296	40.9760	27	26	936	19	PA	CLEARFIELD	PA17	5859
37033252260000	-78.7316	40.9766	28	27	926	21	PA	CLEARFIELD	PA17	5863
37033252270000	-78.7327	40.9785	27	25	955	19	PA	CLEARFIELD	PA17	5834
37033252290000	-78.7238	40.9699	26	24	918	19	PA	CLEARFIELD	PA17	5942

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37033252380000	-78.7218	40.9693	27	26	964	18	PA	CLEARFIELD	PA17	5934
37033252400000	-78.7197	40.9687	27	25	900	20	PA	CLEARFIELD	PA17	5927
37033252440000	-78.7342	40.9728	27	25	910	19	PA	CLEARFIELD	PA17	5968
37033252460000	-78.7068	40.9648	27	26	936	19	PA	CLEARFIELD	PA17	5824
37033252470000	-78.7080	40.9631	28	26	917	20	PA	CLEARFIELD	PA17	5873
37033252500000	-78.7096	40.9615	27	26	927	20	PA	CLEARFIELD	PA17	5927
37033252510000	-78.7228	40.9652	28	27	955	20	PA	CLEARFIELD	PA17	6043
37033252640000	-78.7586	40.9804	28	28	1001	19	PA	CLEARFIELD	PA17	6080
37033252670000	-78.7068	40.9614	27	26	936	19	PA	CLEARFIELD	PA17	5875
37033252730000	-78.6762	40.9772	31	31	1073	20	PA	CLEARFIELD	PA17	5303
37033252870000	-78.6596	40.9295	25	24	1029	15	PA	CLEARFIELD	PA17	5536
37033253080000	-78.7183	40.9715	27	25	900	20	PA	CLEARFIELD	PA17	5849
37033253090000	-78.7121	40.9701	27	26	920	20	PA	CLEARFIELD	PA17	5809
37033253170000	-78.7282	40.9772	26	24	919	18	PA	CLEARFIELD	PA17	5821
37033253810000	-78.7355	40.9649	32	31	1010	22	PA	CLEARFIELD	PA17	6165
37033253850000	-78.7364	40.9687	28	27	957	20	PA	CLEARFIELD	PA17	6081
37033253990000	-78.7221	40.9710	26	24	910	19	PA	CLEARFIELD	PA17	5899
37033254000000	-78.7304	40.9744	28	26	926	20	PA	CLEARFIELD	PA17	5900
37033254030000	-78.7283	40.9747	27	26	949	19	PA	CLEARFIELD	PA17	5875
37033254910000	-78.2848	40.9328	67	81	2444	24	PA	CLEARFIELD	PA17	6300
37033266360000	-78.4700	40.9964	38	45	1682	17	PA	CLEARFIELD	PA17	5637
37051200180000	-79.4822	39.7790	70	86	2692	23	PA	FAYETTE	PA17	7733
37051200530000	-79.6428	39.7286	38	37	960	30	PA	FAYETTE	PA17	1349
37051203230000	-79.4375	39.8193	61	76	2622	20	PA	FAYETTE	PA17	8063
37051204400000	-79.5195	39.7492	38	44	1538	19	PA	FAYETTE	PA17	3761
37059009650000	-80.4224	39.7815	36	35	976	27	PA	GREENE	PA17	552
37059215090000	-79.9465	39.7289	24	22	885	17	PA	GREENE	PA17	1007
37059231350000	-80.3526	39.9432	27	28	1097	16	PA	GREENE	PA17	6069
37059231590000	-80.3575	39.8873	25	25	1059	15	PA	GREENE	PA17	6521
37059231680000	-80.3606	39.8916	51	59	1747	24	PA	GREENE	PA17	6566
37059231830000	-80.3233	40.0000	29	28	999	20	PA	GREENE	PA17	5755
37059232240000	-80.3590	39.9019	48	55	1696	23	PA	GREENE	PA17	6882
37059233080000	-80.3397	39.9888	31	30	977	23	PA	GREENE	PA17	6168
37059233490000	-80.3692	39.8873	52	60	1776	24	PA	GREENE	PA17	6989
37059233520000	-80.3672	39.8848	47	55	1727	22	PA	GREENE	PA17	6980
37059233780000	-80.3654	39.8873	46	54	1747	21	PA	GREENE	PA17	7027
37059233940000	-80.3617	39.8879	49	57	1731	23	PA	GREENE	PA17	6977
37065201710000	-78.8429	41.0472	58	71	2228	22	PA	JEFFERSON	PA17	5430
37065211360000	-79.1636	40.9701	64	77	2237	25	PA	JEFFERSON	PA17	5267

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37065211730000	-79.1196	41.1560	29	27	912	22	PA	JEFFERSON	PA17	4239
37065212130000	-79.0260	40.9916	62	74	2172	25	PA	JEFFERSON	PA17	5710
37065212840000	-79.1786	41.0984	23	17	648	21	PA	JEFFERSON	PA17	4229
37065215580000	-79.1305	41.2228	22	20	865	15	PA	JEFFERSON	PA17	4239
37065215680000	-79.1346	41.2268	29	26	867	23	PA	JEFFERSON	PA17	4233
37065218140000	-79.0287	41.1773	26	26	1010	17	PA	JEFFERSON	PA17	4274
37065220950000	-79.1922	41.0214	31	32	1075	21	PA	JEFFERSON	PA17	4487
37065224640000	-79.1964	40.9881	32	32	1074	21	PA	JEFFERSON	PA17	4769
37065226450000	-79.1048	40.9699	31	32	1087	20	PA	JEFFERSON	PA17	4895
37065226460000	-79.1025	40.9676	31	32	1085	20	PA	JEFFERSON	PA17	4926
37065232520000	-79.1717	41.0986	31	29	925	24	PA	JEFFERSON	PA17	4230
37065232940000	-78.9630	41.0655	30	30	1052	20	PA	JEFFERSON	PA17	5042
37065233600000	-79.1902	41.0752	26	23	815	21	PA	JEFFERSON	PA17	4250
37065233810000	-79.2054	41.0781	27	26	932	20	PA	JEFFERSON	PA17	4254
37065234090000	-79.0855	41.0603	30	30	1036	21	PA	JEFFERSON	PA17	4666
37065234100000	-79.0629	41.0109	49	61	2165	18	PA	JEFFERSON	PA17	4854
37065234130000	-78.9345	41.2565	27	25	919	19	PA	JEFFERSON	PA17	4266
37065234190000	-79.0055	41.3395	49	61	2170	18	PA	JEFFERSON	PA17	4620
37065235890000	-78.9475	41.0610	27	28	1069	17	PA	JEFFERSON	PA17	5116
37065236420000	-78.9654	41.1347	20	18	928	12	PA	JEFFERSON	PA17	4356
37065236430000	-78.9616	41.1368	27	26	958	19	PA	JEFFERSON	PA17	4339
37065237290000	-79.0835	40.9725	24	23	980	15	PA	JEFFERSON	PA17	4958
37065237390000	-79.1758	41.0970	26	24	939	18	PA	JEFFERSON	PA17	4231
37065239120000	-79.1450	41.1071	23	19	736	19	PA	JEFFERSON	PA17	4259
37065239140000	-79.1386	41.1091	26	24	963	17	PA	JEFFERSON	PA17	4273
37065239150000	-79.1359	41.1088	26	25	978	17	PA	JEFFERSON	PA17	4282
37065239170000	-79.1297	41.1216	26	24	963	17	PA	JEFFERSON	PA17	4263
37065239210000	-79.1506	41.0985	23	19	739	19	PA	JEFFERSON	PA17	4271
37065239240000	-79.1356	41.0996	27	26	960	19	PA	JEFFERSON	PA17	4317
37065239320000	-79.1361	41.1126	23	22	969	15	PA	JEFFERSON	PA17	4270
37065239330000	-79.1375	41.0953	28	27	960	20	PA	JEFFERSON	PA17	4326
37065239340000	-79.1357	41.0970	30	29	960	22	PA	JEFFERSON	PA17	4326
37065239390000	-79.1535	41.0962	23	21	912	15	PA	JEFFERSON	PA17	4270
37065239410000	-79.1538	41.0989	26	24	959	17	PA	JEFFERSON	PA17	4260
37065240130000	-79.1362	41.1186	26	25	961	18	PA	JEFFERSON	PA17	4253
37065240140000	-79.1553	41.1185	24	23	946	16	PA	JEFFERSON	PA17	4235
37065240250000	-79.2109	41.1212	27	25	945	19	PA	JEFFERSON	PA17	4234
37065240500000	-79.1458	41.1231	27	26	976	18	PA	JEFFERSON	PA17	4238
37065240540000	-79.1185	41.1242	26	25	992	17	PA	JEFFERSON	PA17	4287

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37065240990000	-79.1270	41.1065	27	26	977	18	PA	JEFFERSON	PA17	4320
37065241900000	-79.2107	41.1240	33	31	955	25	PA	JEFFERSON	PA17	4232
37065243210000	-79.2093	41.1538	34	38	1359	19	PA	JEFFERSON	PA17	4221
37065244460000	-78.8754	41.0436	28	28	1060	18	PA	JEFFERSON	PA17	5424
37065245280000	-79.2086	41.2073	26	21	705	23	PA	JEFFERSON	PA17	4192
37065246400000	-78.8218	40.9944	30	31	1091	19	PA	JEFFERSON	PA17	6254
37065246480000	-78.9809	41.2538	24	24	983	16	PA	JEFFERSON	PA17	4246
37065246510000	-78.8280	41.0766	28	29	1098	18	PA	JEFFERSON	PA17	4805
37065246520000	-78.8886	41.0416	32	32	1064	21	PA	JEFFERSON	PA17	5631
37065246530000	-78.8897	41.0371	30	31	1138	18	PA	JEFFERSON	PA17	5703
37065246590000	-78.9826	41.2589	27	27	1016	18	PA	JEFFERSON	PA17	4247
37065246720000	-79.2011	41.2047	28	27	989	19	PA	JEFFERSON	PA17	4212
37065249220000	-79.2038	40.9167	28	27	1006	19	PA	JEFFERSON	PA17	4820
37065249280000	-79.2005	40.9151	29	29	1037	19	PA	JEFFERSON	PA17	4838
37111200020000	-79.1887	39.7354	64	80	2612	21	PA	SOMERSET	PA17	2788
37111200040000	-79.0449	40.1234	58	73	2601	19	PA	SOMERSET	PA17	7378
37111200050000	-79.0909	40.2121	72	86	2517	25	PA	SOMERSET	PA17	7533
37111200110000	-79.0658	40.0963	54	69	2562	18	PA	SOMERSET	PA17	7334
37111200170000	-79.0891	40.1072	66	81	2625	22	PA	SOMERSET	PA17	7356
37111200210000	-79.0634	40.2411	73	87	2421	27	PA	SOMERSET	PA17	7416
37111200220000	-79.0796	40.1010	70	86	2617	23	PA	SOMERSET	PA17	6739
37111200230000	-79.1039	40.1860	62	76	2515	21	PA	SOMERSET	PA17	7415
37111200260000	-79.1314	40.1620	59	75	2687	19	PA	SOMERSET	PA17	7607
37111200270000	-78.9969	40.0947	86	102	2809	27	PA	SOMERSET	PA17	7368
37111200280000	-79.1179	40.1750	80	94	2415	29	PA	SOMERSET	PA17	7506
37111200290000	-78.7775	39.9262	70	86	2827	22	PA	SOMERSET	PA17	8405
37111200300000	-79.0385	39.9610	76	91	2715	25	PA	SOMERSET	PA17	7629
37111200310000	-79.0285	39.9684	63	79	2699	20	PA	SOMERSET	PA17	7603
37111200320000	-79.0468	39.9514	72	88	2728	23	PA	SOMERSET	PA17	7635
37111200350000	-78.9025	40.0846	77	93	2802	24	PA	SOMERSET	PA17	7475
37111200370000	-79.1255	40.0916	68	83	2698	22	PA	SOMERSET	PA17	7424
37111200380000	-79.1659	40.0544	67	82	2676	22	PA	SOMERSET	PA17	7434
37111200390000	-79.1963	39.7270	62	77	2636	20	PA	SOMERSET	PA17	1507
37111200410000	-78.8536	40.2269	39	44	1488	20	PA	SOMERSET	PA17	6745
37111200420000	-79.1634	39.9908	73	90	2972	22	PA	SOMERSET	PA17	7378
37111200430000	-78.9424	40.0305	61	76	2661	19	PA	SOMERSET	PA17	6796
37111200440000	-79.1137	40.0682	73	89	2670	24	PA	SOMERSET	PA17	7352
37111200490000	-78.9235	40.0589	64	80	2692	21	PA	SOMERSET	PA17	7478
37111200510000	-78.7733	40.2250	64	80	2700	20	PA	SOMERSET	PA17	7448

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37111200570000	-78.9952	40.2527	64	80	2764	20	PA	SOMERSET	PA17	7336
37111200590000	-78.9368	40.0446	66	82	2760	20	PA	SOMERSET	PA17	7469
37111200620000	-78.8688	40.1762	64	80	2711	20	PA	SOMERSET	PA17	7361
37111200630000	-78.9567	40.0189	68	84	2788	21	PA	SOMERSET	PA17	7532
37111200650000	-79.0334	40.1802	82	98	2735	27	PA	SOMERSET	PA17	7319
37111200690000	-79.0002	40.2449	66	81	2732	21	PA	SOMERSET	PA17	7316
37111200700000	-78.8766	40.1673	69	86	2773	22	PA	SOMERSET	PA17	7433
37111200720000	-79.1889	40.0119	73	88	2698	24	PA	SOMERSET	PA17	7507
37111200730000	-78.9094	40.0720	64	80	2687	21	PA	SOMERSET	PA17	7451
37111200740000	-79.1199	39.9410	67	83	2726	21	PA	SOMERSET	PA17	7291
37111200760000	-79.1849	40.0230	84	99	2658	28	PA	SOMERSET	PA17	7446
37111200770000	-79.1273	40.0030	76	92	2857	23	PA	SOMERSET	PA17	7352
37111200790000	-78.9541	40.0182	58	74	2719	18	PA	SOMERSET	PA17	7549
37111200800000	-79.1101	39.9342	67	83	2757	21	PA	SOMERSET	PA17	7398
37111200810000	-79.1712	39.9221	73	89	2675	24	PA	SOMERSET	PA17	7411
37111200830000	-79.0581	40.0392	89	106	2789	29	PA	SOMERSET	PA17	7408
37111200840000	-79.0779	39.9876	79	95	2845	25	PA	SOMERSET	PA17	7391
37111200850000	-79.1186	39.9240	72	87	2697	23	PA	SOMERSET	PA17	7417
37111200860000	-79.1906	39.9669	79	96	2827	25	PA	SOMERSET	PA17	7551
37111200870000	-79.1747	39.9425	67	83	2733	21	PA	SOMERSET	PA17	7424
37111200890000	-78.8589	40.1394	69	86	2783	22	PA	SOMERSET	PA17	7524
37111200900000	-79.1056	39.9580	69	85	2775	22	PA	SOMERSET	PA17	7342
37111200920000	-79.1303	39.9264	70	86	2786	22	PA	SOMERSET	PA17	7375
37111200930000	-79.1596	39.9397	78	94	2749	25	PA	SOMERSET	PA17	7381
37111200950000	-79.1934	39.9997	72	88	2727	23	PA	SOMERSET	PA17	7551
37111200960000	-78.8655	40.1475	79	95	2762	25	PA	SOMERSET	PA17	7453
37111200970000	-79.1891	39.9725	77	93	2765	25	PA	SOMERSET	PA17	7536
37111200990000	-78.8527	40.1784	78	94	2735	25	PA	SOMERSET	PA17	7342
37111201000000	-78.7675	40.1840	66	82	2800	20	PA	SOMERSET	PA17	7499
37111201010000	-79.1035	40.0774	76	91	2657	25	PA	SOMERSET	PA17	7319
37111201030000	-78.7506	40.2190	74	91	2815	23	PA	SOMERSET	PA17	7507
37111201040000	-79.1471	39.9265	69	85	2754	22	PA	SOMERSET	PA17	7294
37111201060000	-79.1474	39.9857	62	78	2810	19	PA	SOMERSET	PA17	7395
37111201070000	-79.0395	40.0439	74	91	2874	23	PA	SOMERSET	PA17	7417
37111201100000	-79.1963	39.9350	74	90	2721	24	PA	SOMERSET	PA17	7689
37111201110000	-79.0139	40.0494	68	84	2828	21	PA	SOMERSET	PA17	7380
37111201120000	-79.2663	39.9374	74	89	2570	25	PA	SOMERSET	PA17	7798
37111201140000	-79.1965	39.9612	82	98	2760	26	PA	SOMERSET	PA17	7573
37111201190000	-79.2215	39.8219	61	76	2637	20	PA	SOMERSET	PA17	7560

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37111201200000	-79.2763	39.9421	71	86	2491	25	PA	SOMERSET	PA17	7816
37111201270000	-79.1589	39.9705	74	90	2687	24	PA	SOMERSET	PA17	7359
37111201280000	-79.0788	40.0702	74	90	2687	24	PA	SOMERSET	PA17	7391
37111201300000	-79.0418	40.0754	53	69	2793	16	PA	SOMERSET	PA17	7373
37111201320000	-78.8301	39.8722	60	74	2453	21	PA	SOMERSET	PA17	8373
37111201350000	-79.0335	39.9060	60	76	2666	19	PA	SOMERSET	PA17	7851
37111201420000	-79.2771	39.8553	70	86	2809	22	PA	SOMERSET	PA17	7835
37111201440000	-79.2604	39.8701	61	78	2829	18	PA	SOMERSET	PA17	7845
37111201470000	-79.1630	39.7951	96	112	2876	30	PA	SOMERSET	PA17	8551
37111201610000	-79.1471	39.7897	60	76	2749	19	PA	SOMERSET	PA17	8434
37111201680000	-79.1599	39.7641	71	87	2700	23	PA	SOMERSET	PA17	6730
37111201690000	-78.8369	40.0646	69	86	2909	21	PA	SOMERSET	PA17	7932
37111201700000	-79.0675	40.2431	66	80	2471	23	PA	SOMERSET	PA17	7448
37111201710000	-79.1392	39.7756	41	48	1659	19	PA	SOMERSET	PA17	7173
37111201730000	-79.2847	39.8438	72	88	2770	23	PA	SOMERSET	PA17	7726
37111201760000	-79.2924	39.8482	62	78	2736	19	PA	SOMERSET	PA17	7768
37111201790000	-79.0784	40.1214	74	90	2748	24	PA	SOMERSET	PA17	7388
37111201800000	-78.8932	40.0937	68	84	2758	22	PA	SOMERSET	PA17	7454
37111201830000	-79.1706	39.7557	59	75	2720	18	PA	SOMERSET	PA17	5678
37111201840000	-79.0079	40.2171	68	84	2740	22	PA	SOMERSET	PA17	7289
37111201850000	-79.0497	40.0640	74	91	2880	23	PA	SOMERSET	PA17	7429
37111201860000	-79.0370	40.1670	70	86	2682	23	PA	SOMERSET	PA17	7324
37111201870000	-79.0575	40.1451	68	84	2701	22	PA	SOMERSET	PA17	7315
37111201900000	-79.0166	40.1048	72	88	2775	23	PA	SOMERSET	PA17	7367
37111201930000	-79.0044	40.0826	71	87	2780	22	PA	SOMERSET	PA17	7357
37111201940000	-78.9965	40.0307	66	83	2839	20	PA	SOMERSET	PA17	7427
37111202210000	-79.1285	40.1505	61	76	2591	20	PA	SOMERSET	PA17	7552
37111202380000	-79.2603	39.7877	48	63	2690	14	PA	SOMERSET	PA17	8214
37111202630000	-79.1395	39.7508	41	50	1841	17	PA	SOMERSET	PA17	4908
37111202640000	-79.1266	39.7616	44	53	1828	19	PA	SOMERSET	PA17	6440
37125200650000	-80.3171	40.4099	50	61	2004	20	PA	WASHINGTON	PA17	1583
37125211470000	-80.3505	40.0789	29	28	928	22	PA	WASHINGTON	PA17	5920
37125214460000	-80.3333	40.2500	59	68	1836	27	PA	WASHINGTON	PA17	5169
37125214600000	-80.2833	40.2500	60	71	2095	24	PA	WASHINGTON	PA17	5193
37125218920000	-80.3838	40.1861	27	24	827	21	PA	WASHINGTON	PA17	5087
37125218940000	-80.3772	40.1703	27	23	798	22	PA	WASHINGTON	PA17	5167
37125220920000	-80.3251	40.0088	49	56	1657	24	PA	WASHINGTON	PA17	5710
37125222610000	-80.3146	40.2729	64	76	2083	27	PA	WASHINGTON	PA17	5371
37129203820000	-79.1132	40.2128	57	69	2162	22	PA	WESTMORELAND	PA17	7663

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37129207250000	-79.0891	40.2462	69	83	2440	25	PA	WESTMORELAND	PA17	7719
37129230420000	-79.1364	40.2088	89	103	2416	33	PA	WESTMORELAND	PA17	7727
37129231350000	-79.1264	40.2225	60	73	2298	22	PA	WESTMORELAND	PA17	7556
37129239730000	-79.0950	40.2475	53	66	2350	19	PA	WESTMORELAND	PA17	7745
37129244420000	-79.6797	40.6132	26	26	1054	16	PA	WESTMORELAND	PA17	5252
37129245320000	-79.6477	40.6422	33	32	955	25	PA	WESTMORELAND	PA17	5209
37129248100000	-79.7239	40.6011	27	26	946	19	PA	WESTMORELAND	PA17	5255
37007200230000	-80.4491	40.7516	37	42	1451	19	PA	BEAVER	PA17	3903
37007200240000	-80.4587	40.7448	41	46	1484	21	PA	BEAVER	PA17	3931
37007200270000	-80.4026	40.7565	48	54	1496	26	PA	BEAVER	PA17	3967
37007200540000	-80.5043	40.7862	49	53	1341	30	PA	BEAVER	PA17	3870
37007200600000	-80.4340	40.6021	54	68	2313	20	PA	BEAVER	PA17	3974
37007200890000	-80.3412	40.5218	27	25	900	20	PA	BEAVER	PA17	3986
37007200930000	-80.4979	40.4878	55	63	1722	27	PA	BEAVER	PA17	4062
37007202710000	-80.4872	40.7231	43	49	1540	22	PA	BEAVER	PA17	3960
37019206900000	-80.0811	40.8813	52	65	2317	18	PA	BUTLER	PA17	4109
37019213590000	-79.9535	41.1630	56	67	2083	22	PA	BUTLER	PA17	4088
37019213620000	-79.9641	41.1648	52	63	2071	21	PA	BUTLER	PA17	4095
37021205210000	-78.7002	40.7131	31	31	1110	19	PA	CAMBRIA	PA17	5469
37031206720000	-79.5303	41.3285	47	58	2063	19	PA	CLARION	PA17	4196
37051200940000	-79.6472	39.7216	67	81	2423	24	PA	FAYETTE	PA17	6005
37065245040000	-78.8324	40.9684	31	30	1006	21	PA	JEFFERSON	PA17	4398
37065246240000	-78.8302	40.9706	31	32	1098	20	PA	JEFFERSON	PA17	4395
37073200070000	-80.1746	41.0505	60	66	1498	34	PA	LAWRENCE	PA17	3660
37073200080000	-80.1835	40.9758	48	53	1480	26	PA	LAWRENCE	PA17	3698
37073200220000	-80.2819	41.0920	41	44	1280	25	PA	LAWRENCE	PA17	3599
37073200360000	-80.4516	40.9605	54	64	1890	24	PA	LAWRENCE	PA17	3915
37073200560000	-80.1557	41.0362	54	65	2040	22	PA	LAWRENCE	PA17	4038
37073201540000	-80.2712	41.1214	52	62	1929	22	PA	LAWRENCE	PA17	3985
37073201570000	-80.2798	41.1185	52	61	1888	23	PA	LAWRENCE	PA17	3947
37073201590000	-80.2798	41.1233	52	61	1900	22	PA	LAWRENCE	PA17	3958
37073201610000	-80.2799	41.1136	52	61	1890	23	PA	LAWRENCE	PA17	3947
37073201620000	-80.2454	41.1134	51	60	1912	22	PA	LAWRENCE	PA17	3602
37073201630000	-80.2657	41.1171	52	61	1894	23	PA	LAWRENCE	PA17	3962
37073201640000	-80.2725	41.1172	52	62	1920	23	PA	LAWRENCE	PA17	3978
37073201670000	-80.2613	41.1271	52	61	1909	22	PA	LAWRENCE	PA17	3969
37073201690000	-80.2674	41.1118	52	61	1902	22	PA	LAWRENCE	PA17	3956
37073201700000	-80.2944	41.1131	52	61	1908	22	PA	LAWRENCE	PA17	3967
37073201710000	-80.2594	41.1218	52	61	1909	22	PA	LAWRENCE	PA17	3963

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37073201720000	-80.3024	41.1245	52	61	1857	23	PA	LAWRENCE	PA17	3919
37073201730000	-80.2741	41.1122	52	61	1896	22	PA	LAWRENCE	PA17	3947
37073201740000	-80.2861	41.1234	52	61	1880	23	PA	LAWRENCE	PA17	3946
37073201750000	-80.3032	41.1164	52	61	1902	22	PA	LAWRENCE	PA17	3930
37073201760000	-80.2881	41.1132	51	61	1922	22	PA	LAWRENCE	PA17	3976
37073201770000	-80.2834	41.1100	48	57	1888	21	PA	LAWRENCE	PA17	3939
37073201780000	-80.2965	41.1084	52	61	1870	23	PA	LAWRENCE	PA17	3931
37073201790000	-80.2856	41.1053	52	61	1892	23	PA	LAWRENCE	PA17	3946
37073201800000	-80.3142	41.1266	46	55	1813	20	PA	LAWRENCE	PA17	3867
37073201810000	-80.2706	41.1074	45	55	1885	19	PA	LAWRENCE	PA17	3936
37073201830000	-80.2970	41.1026	49	58	1867	21	PA	LAWRENCE	PA17	3918
37073201870000	-80.3654	41.1198	52	61	1852	23	PA	LAWRENCE	PA17	3541
37129224860000	-79.4953	40.4043	34	36	1174	22	PA	WESTMORELAND	PA17	4574
37003215400000	-79.7876	40.5028	30	32	1191	18	PA	ALLEGHENY	PA17	5658
37065212850000	-78.9214	41.0274	66	78	2214	26	PA	JEFFERSON	PA17	6224
37065203480000	-78.9098	41.0326	73	85	2176	30	PA	JEFFERSON	PA17	6207
37065214490000	-78.9542	41.0427	67	79	2185	27	PA	JEFFERSON	PA17	5805
37021200190000	-78.8486	40.4934	72	88	2649	24	PA	CAMBRIA	PA17	7454
37059231640000	-80.3626	39.8832	47	55	1741	22	PA	GREENE	PA17	6571
37003214050000	-79.7666	40.5092	28	29	1120	17	PA	ALLEGHENY	PA17	5629
37003215560000	-79.8082	40.4805	32	35	1267	18	PA	ALLEGHENY	PA17	5877
37065204800000	-78.9241	41.0122	52	65	2370	18	PA	JEFFERSON	PA17	6313
37003213970000	-79.7683	40.5060	32	34	1187	20	PA	ALLEGHENY	PA17	5623
37003213520000	-79.7499	40.5310	32	33	1176	19	PA	ALLEGHENY	PA17	5599
37065203860000	-78.9527	40.9966	76	89	2281	29	PA	JEFFERSON	PA17	6185
37005247890000	-79.5273	40.5512	27	28	1128	16	PA	ARMSTRONG	PA17	5924
37003215760000	-79.8089	40.4520	32	35	1258	18	PA	ALLEGHENY	PA17	6057
37065203770000	-78.9701	40.9807	72	84	2203	28	PA	JEFFERSON	PA17	6124
37065205230000	-78.9645	40.9811	70	82	2173	28	PA	JEFFERSON	PA17	6127
37129248840000	-79.6487	40.4878	30	31	1148	18	PA	WESTMORELAND	PA17	5692
37065205530000	-78.9478	40.9988	53	66	2299	19	PA	JEFFERSON	PA17	6176
37065249310000	-78.8154	40.9606	28	28	1002	19	PA	JEFFERSON	PA17	6546
37065247610000	-78.8198	40.9599	26	25	972	17	PA	JEFFERSON	PA17	6530
37005243930000	-79.5304	40.5530	32	33	1111	20	PA	ARMSTRONG	PA17	5905
37065249760000	-78.8210	40.9657	29	28	982	20	PA	JEFFERSON	PA17	6477
37065248130000	-78.8160	40.9645	28	28	1018	19	PA	JEFFERSON	PA17	6527
37129246790000	-79.6488	40.4903	29	28	963	21	PA	WESTMORELAND	PA17	5689
37065204730000	-78.9629	40.9926	67	79	2180	26	PA	JEFFERSON	PA17	6101
37005203490000	-79.3254	40.7007	21	18	861	13	PA	ARMSTRONG	PA17	5783

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37129248830000	-79.6466	40.4903	28	28	1092	17	PA	WESTMORELAND	PA17	5703
37065247460000	-78.8246	40.9620	25	24	975	16	PA	JEFFERSON	PA17	6496
37005220910000	-79.3382	40.7002	32	33	1076	22	PA	ARMSTRONG	PA17	5819
37065248550000	-78.8902	40.9447	29	30	1107	18	PA	JEFFERSON	PA17	6240
37005206000000	-79.4550	40.6102	36	36	1051	26	PA	ARMSTRONG	PA17	5968
37005250330000	-79.4536	40.6076	28	29	1070	18	PA	ARMSTRONG	PA17	6007
37065249250000	-78.8867	40.9426	29	30	1117	18	PA	JEFFERSON	PA17	6281
37005226210000	-79.2199	40.8476	33	35	1180	21	PA	ARMSTRONG	PA17	5558
37005254180000	-79.4413	40.6215	29	30	1113	18	PA	ARMSTRONG	PA17	6085
37065249640000	-78.8218	40.9580	28	28	1001	19	PA	JEFFERSON	PA17	6545
37003213530000	-79.7552	40.5038	32	34	1226	18	PA	ALLEGHENY	PA17	5654
37005209570000	-79.4572	40.6061	35	36	1106	23	PA	ARMSTRONG	PA17	5994
37065245430000	-78.8378	40.9655	25	25	1026	16	PA	JEFFERSON	PA17	6427
37005256020000	-79.4263	40.6337	28	28	1063	18	PA	ARMSTRONG	PA17	6067
37065204950000	-79.0228	40.9572	52	65	2199	20	PA	JEFFERSON	PA17	5945
37005248900000	-79.4882	40.5904	28	29	1070	18	PA	ARMSTRONG	PA17	5889
37065204210000	-78.9909	40.9719	76	89	2219	30	PA	JEFFERSON	PA17	6092
37065203800000	-78.9536	40.9931	41	53	2247	14	PA	JEFFERSON	PA17	6154
37129247680000	-79.6182	40.5185	30	31	1143	18	PA	WESTMORELAND	PA17	5688
37005248370000	-79.4855	40.5926	31	32	1132	19	PA	ARMSTRONG	PA17	5916
37005248520000	-79.4853	40.5895	27	28	1090	17	PA	ARMSTRONG	PA17	5915
37129250180000	-79.6329	40.5098	28	29	1128	17	PA	WESTMORELAND	PA17	5707
37005256080000	-79.4331	40.6305	28	29	1065	18	PA	ARMSTRONG	PA17	6068
37065242800000	-79.0735	40.9149	30	31	1123	19	PA	JEFFERSON	PA17	5627
37005222560000	-79.3326	40.7050	33	33	1092	22	PA	ARMSTRONG	PA17	5734
37003213030000	-79.7033	40.5021	32	35	1284	18	PA	ALLEGHENY	PA17	5706
37065204110000	-78.9969	40.9679	59	71	2228	22	PA	JEFFERSON	PA17	6071
37005209200000	-79.4708	40.6076	32	32	1063	22	PA	ARMSTRONG	PA17	5748
37005248360000	-79.4833	40.5949	27	28	1129	16	PA	ARMSTRONG	PA17	5907
37005250000000	-79.3141	40.6988	27	28	1091	17	PA	ARMSTRONG	PA17	5940
37005257070000	-79.4172	40.6372	23	23	1016	14	PA	ARMSTRONG	PA17	6085
37005256200000	-79.4271	40.6285	27	26	1027	17	PA	ARMSTRONG	PA17	6070
37005263210000	-79.4283	40.6389	27	27	1054	17	PA	ARMSTRONG	PA17	5961
37065248120000	-78.8145	40.9683	32	32	1049	22	PA	JEFFERSON	PA17	6543
37005244570000	-79.5366	40.5582	30	31	1112	19	PA	ARMSTRONG	PA17	5862
37129248820000	-79.6241	40.5070	30	32	1160	18	PA	WESTMORELAND	PA17	5733
37005250930000	-79.4717	40.6045	28	29	1082	18	PA	ARMSTRONG	PA17	5815
37065247670000	-78.8155	40.9561	31	30	992	22	PA	JEFFERSON	PA17	6577
37129236190000	-79.6920	40.5090	31	33	1220	18	PA	WESTMORELAND	PA17	5283

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005233470000	-79.2394	40.7644	31	32	1146	19	PA	ARMSTRONG	PA17	6079
37063333480000	-79.0147	40.8725	30	32	1161	18	PA	INDIANA	PA17	5916
37005206020000	-79.3611	40.6994	31	31	1055	20	PA	ARMSTRONG	PA17	5814
37005248500000	-79.4023	40.6719	33	35	1149	21	PA	ARMSTRONG	PA17	5847
37065248700000	-78.8203	40.9561	28	28	1027	19	PA	JEFFERSON	PA17	6568
37005206340000	-79.4835	40.5967	29	30	1061	19	PA	ARMSTRONG	PA17	5918
37003214080000	-79.7641	40.4994	33	34	1131	22	PA	ALLEGHENY	PA17	5712
37003215390000	-79.7836	40.4999	30	32	1205	18	PA	ALLEGHENY	PA17	5708
37033249790000	-78.7889	40.9675	26	25	1000	17	PA	CLEARFIELD	PA17	6698
37005263250000	-79.4295	40.6333	26	27	1098	16	PA	ARMSTRONG	PA17	6146
37005246340000	-79.4552	40.6030	27	27	1060	17	PA	ARMSTRONG	PA17	5982
37005249840000	-79.4850	40.5869	27	27	1063	17	PA	ARMSTRONG	PA17	5927
37005254310000	-79.4447	40.6229	29	29	1052	19	PA	ARMSTRONG	PA17	6019
37065204740000	-79.0059	40.9594	48	60	2202	18	PA	JEFFERSON	PA17	6048
37005255930000	-79.4408	40.6271	24	25	1056	15	PA	ARMSTRONG	PA17	6058
37005239400000	-79.2310	40.8381	30	31	1119	19	PA	ARMSTRONG	PA17	5580
37005231280000	-79.2405	40.7712	28	29	1105	17	PA	ARMSTRONG	PA17	5954
37003216270000	-79.8032	40.4325	30	30	1069	20	PA	ALLEGHENY	PA17	6004
37005207730000	-79.4807	40.5986	35	36	1098	24	PA	ARMSTRONG	PA17	5877
37003213840000	-79.7220	40.4980	29	33	1283	16	PA	ALLEGHENY	PA17	5752
37129249450000	-79.6159	40.5010	28	29	1129	17	PA	WESTMORELAND	PA17	5754
37005202700000	-79.4559	40.6285	29	29	1024	20	PA	ARMSTRONG	PA17	5802
37065249300000	-78.8248	40.9564	29	29	1066	19	PA	JEFFERSON	PA17	6557
37005256190000	-79.4510	40.6154	28	28	1024	19	PA	ARMSTRONG	PA17	5961
37003213650000	-79.7522	40.4989	32	34	1195	19	PA	ALLEGHENY	PA17	5702
37003213390000	-79.7075	40.5003	33	35	1220	19	PA	ALLEGHENY	PA17	5686
37065247640000	-78.8244	40.9710	32	32	1061	21	PA	JEFFERSON	PA17	6419
37005222950000	-79.4221	40.6606	31	31	1015	22	PA	ARMSTRONG	PA17	5715
37005228990000	-79.3079	40.7134	34	33	1007	25	PA	ARMSTRONG	PA17	5809
37065247260000	-78.8191	40.9708	29	29	1035	19	PA	JEFFERSON	PA17	6481
37005229800000	-79.2899	40.7197	34	35	1106	23	PA	ARMSTRONG	PA17	6030
37005266990000	-79.4235	40.6612	30	30	1045	20	PA	ARMSTRONG	PA17	5730
37005203340000	-79.3247	40.6916	32	29	869	26	PA	ARMSTRONG	PA17	5899
37003213470000	-79.7068	40.5030	32	35	1223	19	PA	ALLEGHENY	PA17	5344
37003213760000	-79.7323	40.4876	30	33	1273	16	PA	ALLEGHENY	PA17	5869
37005239890000	-79.5319	40.5704	31	32	1082	20	PA	ARMSTRONG	PA17	5788
37005266980000	-79.4184	40.6600	29	29	1045	19	PA	ARMSTRONG	PA17	5788
37005270300000	-79.2828	40.7291	30	31	1117	19	PA	ARMSTRONG	PA17	6024
37005215250000	-79.2248	40.7979	31	32	1105	20	PA	ARMSTRONG	PA17	6005

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005244640000	-79.2305	40.8005	30	30	1031	20	PA	ARMSTRONG	PA17	5922
37005230540000	-79.2204	40.8411	34	35	1109	22	PA	ARMSTRONG	PA17	5574
37005202630000	-79.4530	40.6218	27	26	1002	18	PA	ARMSTRONG	PA17	5944
37005207930000	-79.3211	40.7154	33	32	983	24	PA	ARMSTRONG	PA17	5681
37005207610000	-79.3191	40.7215	33	34	1069	23	PA	ARMSTRONG	PA17	5680
37003214030000	-79.7119	40.5008	31	33	1203	18	PA	ALLEGHENY	PA17	5676
37065204480000	-79.0083	40.9567	52	64	2230	19	PA	JEFFERSON	PA17	6070
37003208480000	-79.7556	40.4656	35	37	1236	21	PA	ALLEGHENY	PA17	6095
37003213110000	-79.7048	40.5060	29	31	1220	16	PA	ALLEGHENY	PA17	5642
37065247520000	-78.9072	41.0065	30	31	1137	18	PA	JEFFERSON	PA17	5838
37005209020000	-79.4972	40.5921	32	32	1069	21	PA	ARMSTRONG	PA17	5826
37005251570000	-79.2675	40.7519	29	30	1161	17	PA	ARMSTRONG	PA17	5906
37063320210000	-79.1651	40.8248	31	32	1073	21	PA	INDIANA	PA17	5760
37065248510000	-78.8347	40.9545	28	28	1010	19	PA	JEFFERSON	PA17	6560
37005247200000	-79.4021	40.7220	29	31	1144	18	PA	ARMSTRONG	PA17	5632
37005235540000	-79.2235	40.8081	31	33	1184	18	PA	ARMSTRONG	PA17	5923
37003213630000	-79.7373	40.5145	31	32	1130	19	PA	ALLEGHENY	PA17	5591
37005248270000	-79.4164	40.6578	31	32	1121	20	PA	ARMSTRONG	PA17	5829
37005244150000	-79.2551	40.7711	31	32	1134	19	PA	ARMSTRONG	PA17	5781
37005202020000	-79.4969	40.5860	32	33	1069	22	PA	ARMSTRONG	PA17	5904
37005247750000	-79.2498	40.7683	33	34	1129	21	PA	ARMSTRONG	PA17	5906
37005238020000	-79.4514	40.6315	22	23	1068	12	PA	ARMSTRONG	PA17	5946
37005244380000	-79.4812	40.6021	27	28	1101	17	PA	ARMSTRONG	PA17	5805
37003212940000	-79.7041	40.5093	30	33	1253	17	PA	ALLEGHENY	PA17	5623
37005248730000	-79.4792	40.6069	29	31	1129	18	PA	ARMSTRONG	PA17	5781
37005252850000	-79.4637	40.6261	31	31	1012	22	PA	ARMSTRONG	PA17	5778
37005248100000	-79.5332	40.5814	30	31	1126	19	PA	ARMSTRONG	PA17	5720
37005208650000	-79.4632	40.6234	35	34	1004	26	PA	ARMSTRONG	PA17	5765
37005234940000	-79.2583	40.7717	31	32	1149	19	PA	ARMSTRONG	PA17	5782
37005233980000	-79.2661	40.7571	31	32	1138	19	PA	ARMSTRONG	PA17	5856
37003211800000	-79.8042	40.4098	28	28	1056	18	PA	ALLEGHENY	PA17	6080
37005214530000	-79.4167	40.6667	64	77	2230	25	PA	ARMSTRONG	PA17	5813
37129247930000	-79.6433	40.5094	31	32	1177	18	PA	WESTMORELAND	PA17	5681
37005240740000	-79.2821	40.7415	32	32	1094	21	PA	ARMSTRONG	PA17	5938
37065205100000	-79.0274	40.9486	66	78	2211	26	PA	JEFFERSON	PA17	6018
37005243910000	-79.2333	40.8108	32	33	1139	20	PA	ARMSTRONG	PA17	5888
37065205120000	-79.0364	40.9390	54	66	2146	21	PA	JEFFERSON	PA17	6008
37063321620000	-79.0221	40.8824	31	32	1131	20	PA	INDIANA	PA17	5827
37003212390000	-79.7112	40.5113	32	35	1308	17	PA	ALLEGHENY	PA17	5638

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005250630000	-79.2785	40.7417	32	36	1349	17	PA	ARMSTRONG	PA17	5952
37005234760000	-79.2841	40.7198	35	36	1104	24	PA	ARMSTRONG	PA17	6084
37005248150000	-79.4746	40.6122	28	30	1180	16	PA	ARMSTRONG	PA17	5781
37005231190000	-79.2199	40.8360	28	29	1104	18	PA	ARMSTRONG	PA17	5586
37005218630000	-79.2336	40.7975	32	31	1010	22	PA	ARMSTRONG	PA17	5981
37005235550000	-79.2242	40.8109	32	34	1204	19	PA	ARMSTRONG	PA17	5908
37005250720000	-79.2689	40.7478	30	31	1150	18	PA	ARMSTRONG	PA17	5925
37005208290000	-79.2481	40.7814	33	33	1077	22	PA	ARMSTRONG	PA17	5883
37003214100000	-79.7432	40.4855	36	38	1227	22	PA	ALLEGHENY	PA17	5865
37005256000000	-79.4452	40.6319	28	27	1019	18	PA	ARMSTRONG	PA17	5984
37063323590000	-79.0390	40.8883	31	32	1102	20	PA	INDIANA	PA17	5763
37129232390000	-79.6259	40.5295	25	25	1042	15	PA	WESTMORELAND	PA17	5573
37005234670000	-79.2552	40.7745	31	33	1129	20	PA	ARMSTRONG	PA17	5752
37003214000000	-79.7295	40.4973	31	33	1223	18	PA	ALLEGHENY	PA17	5732
37005235530000	-79.2203	40.8099	29	30	1084	19	PA	ARMSTRONG	PA17	5887
37005234650000	-79.2650	40.7602	32	34	1156	20	PA	ARMSTRONG	PA17	5827
37005214330000	-79.2522	40.7756	36	36	1099	24	PA	ARMSTRONG	PA17	5845
37065244960000	-78.8462	40.9719	30	31	1116	19	PA	JEFFERSON	PA17	6322
37005256050000	-79.4417	40.6323	27	27	1072	16	PA	ARMSTRONG	PA17	6037
37005250650000	-79.2696	40.7583	31	32	1178	18	PA	ARMSTRONG	PA17	5833
37003212910000	-79.7043	40.5124	32	35	1255	18	PA	ALLEGHENY	PA17	5603
37065204870000	-79.0592	40.9211	75	87	2202	30	PA	JEFFERSON	PA17	6041
37129227660000	-79.6555	40.5128	27	27	1044	17	PA	WESTMORELAND	PA17	5593
37005253380000	-79.2746	40.7382	31	32	1143	19	PA	ARMSTRONG	PA17	6013
37005218460000	-79.2436	40.7874	33	33	1064	22	PA	ARMSTRONG	PA17	5928
37129232410000	-79.6297	40.5285	32	33	1141	20	PA	WESTMORELAND	PA17	5582
37005246530000	-79.2365	40.8110	33	34	1123	22	PA	ARMSTRONG	PA17	5910
37129250980000	-79.6740	40.5193	29	28	997	20	PA	WESTMORELAND	PA17	5392
37005244160000	-79.2587	40.7746	29	30	1152	17	PA	ARMSTRONG	PA17	5750
37003215650000	-79.7629	40.4752	32	35	1236	19	PA	ALLEGHENY	PA17	5965
37065244780000	-78.8926	40.9378	28	29	1118	17	PA	JEFFERSON	PA17	6271
37003216240000	-79.7942	40.4364	31	32	1175	18	PA	ALLEGHENY	PA17	6106
37003215660000	-79.7618	40.4717	32	34	1251	18	PA	ALLEGHENY	PA17	6014
37005238030000	-79.4604	40.6367	29	29	1060	19	PA	ARMSTRONG	PA17	5810
37005250180000	-79.2804	40.7619	34	37	1225	21	PA	ARMSTRONG	PA17	5707
37129250390000	-79.6267	40.5132	30	31	1148	18	PA	WESTMORELAND	PA17	5707
37005250070000	-79.4145	40.6733	26	26	1068	15	PA	ARMSTRONG	PA17	5757
37005252920000	-79.4666	40.6224	29	30	1062	19	PA	ARMSTRONG	PA17	5739
37003212850000	-79.7153	40.5132	34	36	1237	20	PA	ALLEGHENY	PA17	5598

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005247520000	-79.2832	40.7599	34	36	1128	23	PA	ARMSTRONG	PA17	5740
37005251630000	-79.2387	40.8320	32	33	1138	20	PA	ARMSTRONG	PA17	5661
37005230880000	-79.3140	40.7254	33	34	1151	21	PA	ARMSTRONG	PA17	5709
37005255660000	-79.4448	40.6377	27	26	1007	18	PA	ARMSTRONG	PA17	5903
37005235520000	-79.2263	40.8137	32	34	1194	19	PA	ARMSTRONG	PA17	5870
37005235560000	-79.2205	40.8132	30	32	1163	18	PA	ARMSTRONG	PA17	5862
37005213130000	-79.2662	40.7712	34	36	1146	22	PA	ARMSTRONG	PA17	5719
37005220680000	-79.2521	40.7821	34	36	1129	23	PA	ARMSTRONG	PA17	5797
37003212400000	-79.7098	40.5141	33	38	1411	17	PA	ALLEGHENY	PA17	5612
37005256030000	-79.4480	40.6443	33	33	1050	23	PA	ARMSTRONG	PA17	5847
37005215040000	-79.2679	40.7748	34	35	1110	23	PA	ARMSTRONG	PA17	5700
37005214970000	-79.2617	40.7736	33	34	1075	23	PA	ARMSTRONG	PA17	5712
37005214950000	-79.2722	40.7763	37	38	1124	25	PA	ARMSTRONG	PA17	5667
37003216090000	-79.7672	40.4649	32	34	1231	18	PA	ALLEGHENY	PA17	6061
37005248280000	-79.4423	40.6544	29	30	1081	19	PA	ARMSTRONG	PA17	5753
37005208520000	-79.4904	40.6025	34	34	1075	23	PA	ARMSTRONG	PA17	5769
37005240680000	-79.2904	40.7278	33	34	1134	21	PA	ARMSTRONG	PA17	5945
37005214340000	-79.2542	40.7807	35	36	1085	24	PA	ARMSTRONG	PA17	5755
37005239780000	-79.5556	40.5694	29	31	1173	17	PA	ARMSTRONG	PA17	5693
37063322890000	-79.0171	40.8936	34	36	1168	22	PA	INDIANA	PA17	5797
37005214960000	-79.2641	40.7778	29	30	1074	19	PA	ARMSTRONG	PA17	5685
37005229780000	-79.2688	40.7785	34	35	1094	23	PA	ARMSTRONG	PA17	5665
37005240880000	-79.2911	40.7607	30	31	1104	19	PA	ARMSTRONG	PA17	5760
37005202500000	-79.3377	40.7223	31	31	1028	22	PA	ARMSTRONG	PA17	5589
37005202780000	-79.4933	40.6242	34	34	1048	24	PA	ARMSTRONG	PA17	5577
37005248400000	-79.4967	40.6222	29	29	1088	18	PA	ARMSTRONG	PA17	5564
37005207450000	-79.4947	40.6201	34	35	1099	23	PA	ARMSTRONG	PA17	5623
37005266510000	-79.5524	40.5954	27	26	1025	17	PA	ARMSTRONG	PA17	5516
37005246970000	-79.4998	40.6152	33	35	1188	20	PA	ARMSTRONG	PA17	5640
37005251130000	-79.4886	40.6196	29	31	1128	18	PA	ARMSTRONG	PA17	5639
37005238010000	-79.4527	40.6395	28	28	1059	18	PA	ARMSTRONG	PA17	5899
37005246120000	-79.4960	40.6073	31	32	1124	19	PA	ARMSTRONG	PA17	5689
37063210820000	-79.0221	40.9058	51	64	2261	19	PA	INDIANA	PA17	6172
37005210310000	-79.3256	40.7363	41	41	1106	29	PA	ARMSTRONG	PA17	5601
37005251050000	-79.4850	40.6195	28	30	1144	17	PA	ARMSTRONG	PA17	5654
37005256520000	-79.4507	40.6462	27	27	1042	17	PA	ARMSTRONG	PA17	5796
37129247570000	-79.6101	40.5546	29	31	1164	18	PA	WESTMORELAND	PA17	5327
37005216020000	-79.5196	40.6187	34	35	1082	24	PA	ARMSTRONG	PA17	5594
37005245780000	-79.5039	40.6153	33	35	1180	20	PA	ARMSTRONG	PA17	5626

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005254190000	-79.3411	40.7278	27	28	1151	15	PA	ARMSTRONG	PA17	5617
37005246390000	-79.4925	40.6141	33	35	1204	20	PA	ARMSTRONG	PA17	5660
37005245630000	-79.5155	40.6149	31	33	1165	19	PA	ARMSTRONG	PA17	5615
37005253440000	-79.5052	40.6105	27	28	1132	16	PA	ARMSTRONG	PA17	5647
37005248390000	-79.4925	40.6291	28	28	1079	17	PA	ARMSTRONG	PA17	5551
37005246850000	-79.4893	40.6159	32	33	1162	20	PA	ARMSTRONG	PA17	5662
37005258620000	-79.4887	40.6071	27	28	1141	15	PA	ARMSTRONG	PA17	5734
37005251060000	-79.4821	40.6227	31	32	1132	19	PA	ARMSTRONG	PA17	5605
37005204540000	-79.5375	40.6150	34	35	1114	23	PA	ARMSTRONG	PA17	5655
37005245760000	-79.5089	40.6109	30	31	1120	19	PA	ARMSTRONG	PA17	5652
37005208110000	-79.3344	40.7160	31	32	1123	20	PA	ARMSTRONG	PA17	5708
37005246110000	-79.3351	40.7294	31	32	1128	20	PA	ARMSTRONG	PA17	5597
37005245530000	-79.5189	40.6133	31	32	1164	19	PA	ARMSTRONG	PA17	5626
37005240730000	-79.5259	40.6091	31	33	1202	18	PA	ARMSTRONG	PA17	5679
37065242660000	-79.0154	40.9193	32	34	1178	20	PA	JEFFERSON	PA17	5768
37005214690000	-79.2630	40.7796	32	33	1101	21	PA	ARMSTRONG	PA17	5708
37003212530000	-79.7063	40.5150	31	33	1231	18	PA	ALLEGHENY	PA17	5576
37005201640000	-79.4914	40.6322	29	30	1070	19	PA	ARMSTRONG	PA17	5570
37005248110000	-79.5204	40.6203	30	31	1147	18	PA	ARMSTRONG	PA17	5620
37005257710000	-79.4796	40.6384	29	30	1122	18	PA	ARMSTRONG	PA17	5624
37005233530000	-79.2679	40.7816	37	38	1093	26	PA	ARMSTRONG	PA17	5647
37005204100000	-79.2978	40.7070	24	22	887	17	PA	ARMSTRONG	PA17	6032
37005206090000	-79.5135	40.6205	30	31	1103	19	PA	ARMSTRONG	PA17	5598
37005215050000	-79.2753	40.7748	30	30	1081	19	PA	ARMSTRONG	PA17	5646
37005214780000	-79.2593	40.7555	32	33	1123	21	PA	ARMSTRONG	PA17	5961
37003212660000	-79.7134	40.5156	32	35	1227	19	PA	ALLEGHENY	PA17	5568
37005215070000	-79.2668	40.7840	32	33	1111	21	PA	ARMSTRONG	PA17	5647
37005207990000	-79.2481	40.7886	29	30	1100	19	PA	ARMSTRONG	PA17	5896
37129236400000	-79.6598	40.5586	36	38	1191	23	PA	WESTMORELAND	PA17	5292
37003215130000	-79.7393	40.4913	32	34	1249	18	PA	ALLEGHENY	PA17	5795
37003212570000	-79.7094	40.4977	31	34	1281	17	PA	ALLEGHENY	PA17	5731
37005251970000	-79.2540	40.7617	26	27	1151	14	PA	ARMSTRONG	PA17	5960
37005228430000	-79.3140	40.7541	35	36	1131	23	PA	ARMSTRONG	PA17	5739
37005248820000	-79.3927	40.6929	30	31	1112	19	PA	ARMSTRONG	PA17	5762
37005215080000	-79.2612	40.7846	32	33	1110	21	PA	ARMSTRONG	PA17	5721
37005236960000	-79.2931	40.7768	31	32	1129	20	PA	ARMSTRONG	PA17	5629
37005215090000	-79.2626	40.7877	27	28	1101	17	PA	ARMSTRONG	PA17	5700
37065204220000	-78.9974	40.9575	58	71	2221	22	PA	JEFFERSON	PA17	6117
37005206710000	-79.3816	40.6968	31	31	1060	21	PA	ARMSTRONG	PA17	5837

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005204980000	-79.3622	40.7143	28	29	1122	17	PA	ARMSTRONG	PA17	5739
37065205380000	-79.0100	40.9394	63	75	2183	25	PA	JEFFERSON	PA17	6085
37005229450000	-79.2767	40.7701	31	32	1090	20	PA	ARMSTRONG	PA17	5668
37005227250000	-79.2700	40.8059	32	33	1134	20	PA	ARMSTRONG	PA17	5655
37065204640000	-78.9942	40.9537	49	62	2237	18	PA	JEFFERSON	PA17	6143
37005215060000	-79.2579	40.7882	34	35	1092	23	PA	ARMSTRONG	PA17	5752
37005248680000	-79.4899	40.5842	27	27	1083	16	PA	ARMSTRONG	PA17	5942
37003212280000	-79.7097	40.5211	32	35	1280	18	PA	ALLEGHENY	PA17	5518
37065225570000	-78.9105	41.0010	32	33	1132	21	PA	JEFFERSON	PA17	5836
37005223010000	-79.3528	40.7242	37	37	1105	25	PA	ARMSTRONG	PA17	5611
37005213770000	-79.2731	40.7814	32	33	1121	20	PA	ARMSTRONG	PA17	5629
37129252130000	-79.6598	40.5519	24	26	1207	12	PA	WESTMORELAND	PA17	5341
37005208330000	-79.4702	40.5997	32	33	1085	21	PA	ARMSTRONG	PA17	5889
37005214920000	-79.2525	40.7874	34	35	1091	23	PA	ARMSTRONG	PA17	5797
37129244050000	-79.6094	40.5143	29	30	1113	18	PA	WESTMORELAND	PA17	5729
37003214120000	-79.7532	40.4951	33	35	1207	20	PA	ALLEGHENY	PA17	5731
37005256600000	-79.4944	40.6351	33	34	1112	22	PA	ARMSTRONG	PA17	5589
37005204600000	-79.3068	40.7656	30	30	1038	20	PA	ARMSTRONG	PA17	5704
37065204260000	-79.0208	40.9442	34	35	1113	22	PA	JEFFERSON	PA17	6084
37005237800000	-79.2928	40.7681	31	32	1114	20	PA	ARMSTRONG	PA17	5698
37065204340000	-79.0407	40.9213	67	79	2182	26	PA	JEFFERSON	PA17	6043
37003213000000	-79.7125	40.5184	32	35	1225	19	PA	ALLEGHENY	PA17	5574
37005259320000	-79.3876	40.6954	29	30	1099	18	PA	ARMSTRONG	PA17	5832
37065204290000	-78.9985	40.9618	75	88	2308	29	PA	JEFFERSON	PA17	6087
37065204500000	-79.0374	40.9286	59	72	2182	23	PA	JEFFERSON	PA17	6092
37005239180000	-79.2938	40.7728	29	30	1086	19	PA	ARMSTRONG	PA17	5627
37005204630000	-79.4865	40.6733	27	26	928	20	PA	ARMSTRONG	PA17	5617
37005211150000	-79.5092	40.6411	31	31	1070	20	PA	ARMSTRONG	PA17	5604
37005214940000	-79.2803	40.7784	32	33	1091	21	PA	ARMSTRONG	PA17	5613
37005258360000	-79.3904	40.7164	31	31	1070	21	PA	ARMSTRONG	PA17	5569
37005250300000	-79.2888	40.7671	34	36	1195	21	PA	ARMSTRONG	PA17	5670
37065204880000	-79.0051	40.9435	57	69	2146	22	PA	JEFFERSON	PA17	6091
37065204840000	-79.0329	40.9249	59	71	2213	23	PA	JEFFERSON	PA17	6109
37065204850000	-78.9965	40.9629	51	62	2147	19	PA	JEFFERSON	PA17	6046
37005235870000	-79.2833	40.7668	31	32	1131	20	PA	ARMSTRONG	PA17	5727
37005206500000	-79.3424	40.7327	28	29	1122	17	PA	ARMSTRONG	PA17	5577
37065223660000	-78.9380	40.9767	36	37	1157	23	PA	JEFFERSON	PA17	5863
37065205000000	-79.0287	40.9325	53	66	2182	20	PA	JEFFERSON	PA17	6120
37129242850000	-79.5773	40.5477	29	31	1129	18	PA	WESTMORELAND	PA17	5404

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37063336340000	-79.1543	40.8600	31	32	1085	20	PA	INDIANA	PA17	5627
37065204490000	-79.0146	40.9511	50	62	2196	19	PA	JEFFERSON	PA17	6037
37005230590000	-79.3016	40.7730	43	49	1555	22	PA	ARMSTRONG	PA17	5655
37005244750000	-79.3889	40.7024	29	31	1145	18	PA	ARMSTRONG	PA17	5714
37005238270000	-79.2901	40.7727	27	28	1136	16	PA	ARMSTRONG	PA17	5660
37005235500000	-79.2253	40.8163	32	34	1193	19	PA	ARMSTRONG	PA17	5850
37005235510000	-79.2290	40.8163	33	35	1199	20	PA	ARMSTRONG	PA17	5831
37005229840000	-79.2367	40.7623	34	36	1176	21	PA	ARMSTRONG	PA17	6157
37065204160000	-78.9869	40.9616	56	68	2215	21	PA	JEFFERSON	PA17	6164
37063336520000	-79.0259	40.8722	30	31	1138	18	PA	INDIANA	PA17	5881
37065247690000	-78.8237	40.9738	37	37	1041	27	PA	JEFFERSON	PA17	6418
37003215120000	-79.7240	40.4882	32	35	1292	18	PA	ALLEGHENY	PA17	5869
37005239130000	-79.2838	40.7763	33	33	1087	22	PA	ARMSTRONG	PA17	5593
37005239900000	-79.2877	40.7707	36	36	1107	24	PA	ARMSTRONG	PA17	5665
37005236700000	-79.2832	40.7700	30	31	1100	19	PA	ARMSTRONG	PA17	5668
37003211900000	-79.9637	40.3182	33	35	1195	20	PA	ALLEGHENY	PA17	6504
37005236710000	-79.2827	40.7729	31	32	1104	20	PA	ARMSTRONG	PA17	5646
37005203060000	-79.3025	40.7070	32	31	957	24	PA	ARMSTRONG	PA17	6011
37003213920000	-79.7521	40.4925	30	32	1196	18	PA	ALLEGHENY	PA17	5764
37065204040000	-78.9855	40.9690	85	97	2193	35	PA	JEFFERSON	PA17	6110
37003210700000	-79.7277	40.4833	24	20	747	21	PA	ALLEGHENY	PA17	5886
37003214190000	-79.7274	40.4836	33	36	1237	20	PA	ALLEGHENY	PA17	5888
37005224120000	-79.2327	40.7712	32	32	1052	22	PA	ARMSTRONG	PA17	6048
37005258340000	-79.2327	40.8171	33	34	1138	21	PA	ARMSTRONG	PA17	5781
37005247180000	-79.3764	40.7250	32	33	1118	20	PA	ARMSTRONG	PA17	5597
37005232890000	-79.5089	40.5796	28	29	1160	16	PA	ARMSTRONG	PA17	5873
37005222440000	-79.2745	40.7291	32	33	1092	21	PA	ARMSTRONG	PA17	6065
37003213440000	-79.7167	40.5172	33	35	1210	20	PA	ALLEGHENY	PA17	5542
37005234950000	-79.2440	40.8181	34	35	1101	23	PA	ARMSTRONG	PA17	5731
37005252530000	-79.4681	40.6664	24	24	990	16	PA	ARMSTRONG	PA17	5545
37003215750000	-79.8026	40.4410	31	32	1162	19	PA	ALLEGHENY	PA17	6013
37003213290000	-79.7486	40.4995	29	31	1220	16	PA	ALLEGHENY	PA17	5709
37065204600000	-78.9902	40.9640	72	84	2193	29	PA	JEFFERSON	PA17	6120
37065224740000	-78.9455	40.9742	32	33	1111	20	PA	JEFFERSON	PA17	5854
37065224750000	-78.9467	40.9717	32	33	1132	21	PA	JEFFERSON	PA17	5862
37005234880000	-79.2675	40.8042	32	33	1073	22	PA	ARMSTRONG	PA17	5648
37005208010000	-79.3694	40.7295	40	44	1342	23	PA	ARMSTRONG	PA17	5643
37005228970000	-79.2472	40.8163	29	30	1132	18	PA	ARMSTRONG	PA17	5749
37003212490000	-79.7386	40.5320	34	37	1224	21	PA	ALLEGHENY	PA17	5561

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37003213460000	-79.7514	40.5023	32	34	1209	19	PA	ALLEGHENY	PA17	5681
37003213880000	-79.7335	40.4772	28	31	1272	15	PA	ALLEGHENY	PA17	5984
37005214790000	-79.2551	40.7574	34	35	1113	23	PA	ARMSTRONG	PA17	5970
37003213270000	-79.7404	40.5131	29	30	1106	18	PA	ALLEGHENY	PA17	5587
37005230370000	-79.2596	40.8078	30	31	1104	19	PA	ARMSTRONG	PA17	5729
37003212380000	-79.7087	40.5257	31	34	1300	17	PA	ALLEGHENY	PA17	5502
37003213950000	-79.7564	40.4937	32	34	1209	19	PA	ALLEGHENY	PA17	5757
37005245850000	-79.2934	40.7063	30	31	1118	19	PA	ARMSTRONG	PA17	6083
37003213730000	-79.7346	40.5021	31	33	1233	17	PA	ALLEGHENY	PA17	5687
37005207330000	-79.3579	40.7404	32	33	1089	21	PA	ARMSTRONG	PA17	5658
37005242300000	-79.2431	40.8265	38	39	1144	25	PA	ARMSTRONG	PA17	5689
37005228310000	-79.2603	40.7448	27	28	1135	16	PA	ARMSTRONG	PA17	6095
37005243210000	-79.5064	40.6512	33	35	1134	21	PA	ARMSTRONG	PA17	5657
37003213340000	-79.7209	40.5148	34	37	1202	21	PA	ALLEGHENY	PA17	5564
37065204320000	-79.0050	40.9510	52	64	2178	20	PA	JEFFERSON	PA17	6098
37005239240000	-79.3105	40.7708	29	29	1086	18	PA	ARMSTRONG	PA17	5674
37005258380000	-79.2496	40.8008	32	33	1116	21	PA	ARMSTRONG	PA17	5845
37005248380000	-79.4494	40.6025	32	32	1060	21	PA	ARMSTRONG	PA17	6062
37065204770000	-79.0360	40.9354	55	68	2231	21	PA	JEFFERSON	PA17	6099
37005223150000	-79.2445	40.8123	32	33	1118	20	PA	ARMSTRONG	PA17	5841
37005252020000	-79.2525	40.7590	29	30	1113	18	PA	ARMSTRONG	PA17	5996
37065221600000	-78.9364	40.9855	32	34	1150	20	PA	JEFFERSON	PA17	5822
37005209180000	-79.5148	40.6270	34	35	1083	24	PA	ARMSTRONG	PA17	5573
37065204300000	-79.0217	40.9487	72	85	2199	29	PA	JEFFERSON	PA17	6036
37003213930000	-79.7556	40.4900	29	31	1234	16	PA	ALLEGHENY	PA17	5817
37065248520000	-78.8359	40.9515	29	29	1048	19	PA	JEFFERSON	PA17	6588
37005237110000	-79.2430	40.8214	28	29	1123	17	PA	ARMSTRONG	PA17	5710
37065204310000	-78.9797	40.9660	67	79	2246	26	PA	JEFFERSON	PA17	6172
37003214010000	-79.7231	40.5111	29	30	1052	19	PA	ALLEGHENY	PA17	5623
37065243820000	-78.9211	40.9204	29	30	1118	18	PA	JEFFERSON	PA17	6218
37065204750000	-79.0519	40.9134	60	72	2206	23	PA	JEFFERSON	PA17	6039
37005232280000	-79.2545	40.8036	30	31	1105	19	PA	ARMSTRONG	PA17	5803
37003213990000	-79.7246	40.4854	35	37	1231	21	PA	ALLEGHENY	PA17	5866
37005248700000	-79.4862	40.5838	26	27	1074	16	PA	ARMSTRONG	PA17	5969
37065204710000	-79.0434	40.9296	46	58	2184	17	PA	JEFFERSON	PA17	6077
37065248500000	-78.8328	40.9537	28	28	1029	19	PA	JEFFERSON	PA17	6573
37005218050000	-79.2169	40.7949	33	36	1220	20	PA	ARMSTRONG	PA17	6061
37005242490000	-79.5407	40.6349	27	25	902	20	PA	ARMSTRONG	PA17	5526
37005246470000	-79.3921	40.7260	33	33	1090	22	PA	ARMSTRONG	PA17	5612

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005225080000	-79.2311	40.7748	31	31	1095	20	PA	ARMSTRONG	PA17	6029
37065221610000	-78.9417	40.9872	32	34	1156	20	PA	JEFFERSON	PA17	5797
37005229620000	-79.2751	40.7264	34	34	1041	24	PA	ARMSTRONG	PA17	6060
37005213720000	-79.5155	40.6341	32	32	1075	21	PA	ARMSTRONG	PA17	5573
37065204790000	-79.0435	40.9333	66	78	2199	26	PA	JEFFERSON	PA17	6107
37005256210000	-79.4321	40.6201	29	30	1062	19	PA	ARMSTRONG	PA17	6148
37005254340000	-79.5186	40.5656	28	29	1061	18	PA	ARMSTRONG	PA17	5860
37003215520000	-79.7707	40.4883	30	32	1208	17	PA	ALLEGHENY	PA17	5806
37065223190000	-78.9426	40.9768	33	34	1113	21	PA	JEFFERSON	PA17	5850
37003213170000	-79.7159	40.5199	30	33	1239	17	PA	ALLEGHENY	PA17	5541
37005246130000	-79.2380	40.8289	38	40	1159	25	PA	ARMSTRONG	PA17	5671
37003214070000	-79.7340	40.5093	31	33	1195	18	PA	ALLEGHENY	PA17	5616
37005246160000	-79.2394	40.8262	36	37	1159	23	PA	ARMSTRONG	PA17	5683
37005248690000	-79.4917	40.5820	26	26	1098	15	PA	ARMSTRONG	PA17	5975
37003214260000	-79.7331	40.5058	33	36	1237	20	PA	ALLEGHENY	PA17	5661
37065221620000	-78.9417	40.9827	32	33	1140	20	PA	JEFFERSON	PA17	5823
37005206120000	-79.5267	40.6285	28	28	1033	18	PA	ARMSTRONG	PA17	5547
37003213480000	-79.7245	40.5131	34	37	1243	20	PA	ALLEGHENY	PA17	5601
37003213410000	-79.7227	40.5172	32	34	1217	19	PA	ALLEGHENY	PA17	5557
37005229850000	-79.2368	40.7594	33	35	1216	20	PA	ARMSTRONG	PA17	6213
37005254380000	-79.5169	40.5677	29	29	1061	19	PA	ARMSTRONG	PA17	5882
37065223650000	-78.9426	40.9794	32	33	1125	21	PA	JEFFERSON	PA17	5837
37063336840000	-79.1682	40.8100	31	31	1109	19	PA	INDIANA	PA17	5807
37005203910000	-79.3120	40.6946	23	21	918	15	PA	ARMSTRONG	PA17	6013
37003214020000	-79.7592	40.4884	38	40	1254	23	PA	ALLEGHENY	PA17	5857
37003212870000	-79.7162	40.5301	33	36	1256	19	PA	ALLEGHENY	PA17	5530
37005249390000	-79.4524	40.6007	30	30	1030	20	PA	ARMSTRONG	PA17	5994
37003212510000	-79.7076	40.4951	33	37	1378	17	PA	ALLEGHENY	PA17	5779
37065243810000	-78.9174	40.9219	31	32	1143	19	PA	JEFFERSON	PA17	6228
37129236410000	-79.6889	40.4984	29	31	1163	18	PA	WESTMORELAND	PA17	5375
37005255990000	-79.4455	40.6140	27	28	1074	17	PA	ARMSTRONG	PA17	6076
37063324400000	-79.1187	40.8179	29	30	1114	18	PA	INDIANA	PA17	5785
37003213980000	-79.7330	40.4744	29	31	1223	16	PA	ALLEGHENY	PA17	5982
37003214110000	-79.7306	40.5083	32	34	1206	19	PA	ALLEGHENY	PA17	5600
37005248170000	-79.4764	40.6639	29	30	1054	19	PA	ARMSTRONG	PA17	5595
37003213680000	-79.7477	40.5025	31	33	1222	18	PA	ALLEGHENY	PA17	5678
37065245950000	-78.8345	40.9742	29	29	1060	19	PA	JEFFERSON	PA17	6330
37065249240000	-78.8261	40.9542	28	28	1029	19	PA	JEFFERSON	PA17	6579
37003214040000	-79.7183	40.4892	33	36	1244	20	PA	ALLEGHENY	PA17	5838

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005203820000	-79.2938	40.7037	22	21	992	13	PA	ARMSTRONG	PA17	6070
37003213660000	-79.7510	40.5054	31	33	1225	18	PA	ALLEGHENY	PA17	5643
37005251220000	-79.4857	40.6759	29	29	1035	19	PA	ARMSTRONG	PA17	5543
37003212230000	-79.7137	40.5274	31	35	1317	17	PA	ALLEGHENY	PA17	5541
37129248890000	-79.6357	40.4882	32	30	866	27	PA	WESTMORELAND	PA17	5735
37003215990000	-79.7883	40.4632	43	51	1680	20	PA	ALLEGHENY	PA17	6074
37003213830000	-79.7314	40.5315	32	31	1007	23	PA	ALLEGHENY	PA17	5522
37005249620000	-79.5351	40.6326	29	31	1128	18	PA	ARMSTRONG	PA17	5623
37005256320000	-79.3014	40.7027	29	30	1110	18	PA	ARMSTRONG	PA17	6031
37005249570000	-79.4882	40.5814	28	29	1126	17	PA	ARMSTRONG	PA17	6028
37129248850000	-79.6123	40.4985	30	31	1134	19	PA	WESTMORELAND	PA17	5761
37003214140000	-79.7132	40.4931	31	34	1228	18	PA	ALLEGHENY	PA17	5774
37065248920000	-78.8314	40.9530	29	29	1046	19	PA	JEFFERSON	PA17	6583
37063302240000	-79.1062	40.8385	33	35	1140	21	PA	INDIANA	PA17	5756
37003214060000	-79.7297	40.4758	34	36	1233	20	PA	ALLEGHENY	PA17	5970
37003214340000	-79.7841	40.4078	29	30	1107	18	PA	ALLEGHENY	PA17	6089
37005248710000	-79.4828	40.5826	24	25	1089	14	PA	ARMSTRONG	PA17	6014
37063205800000	-79.0121	40.8635	72	86	2349	27	PA	INDIANA	PA17	6507
37065202660000	-78.8402	40.9454	63	75	2240	24	PA	JEFFERSON	PA17	7078
37003213690000	-79.7462	40.5125	29	30	1101	18	PA	ALLEGHENY	PA17	5589
37003212320000	-79.7258	40.5332	31	34	1262	18	PA	ALLEGHENY	PA17	5482
37005249500000	-79.2417	40.8300	34	35	1104	23	PA	ARMSTRONG	PA17	5656
37003213120000	-79.7251	40.5203	30	32	1220	17	PA	ALLEGHENY	PA17	5554
37003214130000	-79.7346	40.5174	31	32	1132	20	PA	ALLEGHENY	PA17	5587
37063326900000	-79.1290	40.7945	29	30	1131	18	PA	INDIANA	PA17	5887
37065249320000	-78.8119	40.9631	28	28	1010	19	PA	JEFFERSON	PA17	6574
37065236320000	-78.9189	41.0026	27	26	977	19	PA	JEFFERSON	PA17	5822
37005202220000	-79.4733	40.5831	31	31	1031	21	PA	ARMSTRONG	PA17	6063
37005257620000	-79.2988	40.7003	35	36	1109	23	PA	ARMSTRONG	PA17	6077
37003213570000	-79.7282	40.5310	27	27	1004	18	PA	ALLEGHENY	PA17	5527
37063324190000	-79.1259	40.7960	29	31	1130	18	PA	INDIANA	PA17	5885
37003215460000	-79.7825	40.4846	31	31	1083	20	PA	ALLEGHENY	PA17	5810
37003213350000	-79.7023	40.4929	29	32	1248	16	PA	ALLEGHENY	PA17	5822
37065249670000	-78.8324	40.9515	29	29	1019	20	PA	JEFFERSON	PA17	6597
37065249630000	-78.8156	40.9752	29	29	1055	19	PA	JEFFERSON	PA17	6530
37033242920000	-78.7891	40.9611	25	25	1064	15	PA	CLEARFIELD	PA17	6700
37003213700000	-79.7485	40.5164	29	30	1148	17	PA	ALLEGHENY	PA17	5617
37003213860000	-79.7454	40.5079	30	32	1176	18	PA	ALLEGHENY	PA17	5602
37003212360000	-79.7273	40.5230	31	35	1411	15	PA	ALLEGHENY	PA17	5590

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005249580000	-79.4849	40.5802	30	32	1159	18	PA	ARMSTRONG	PA17	6093
37005205650000	-79.3546	40.6862	37	38	1137	24	PA	ARMSTRONG	PA17	5979
37005250310000	-79.3266	40.6889	31	30	1039	21	PA	ARMSTRONG	PA17	5910
37005249610000	-79.5219	40.5463	32	33	1108	21	PA	ARMSTRONG	PA17	5936
37003214090000	-79.7138	40.4872	34	37	1226	21	PA	ALLEGHENY	PA17	5845
37063324200000	-79.1340	40.7919	28	29	1130	17	PA	INDIANA	PA17	5892
37003212670000	-79.7286	40.5258	35	39	1350	19	PA	ALLEGHENY	PA17	5583
37065248880000	-78.8273	40.9519	27	27	1056	17	PA	JEFFERSON	PA17	6602
37005209740000	-79.2985	40.6974	35	35	1008	26	PA	ARMSTRONG	PA17	6066
37005201540000	-79.4636	40.5948	33	32	1004	24	PA	ARMSTRONG	PA17	5912
37129247210000	-79.6329	40.4901	27	27	1078	16	PA	WESTMORELAND	PA17	5738
37005256370000	-79.4372	40.6101	29	30	1063	19	PA	ARMSTRONG	PA17	6151
37005249590000	-79.4814	40.5798	28	29	1127	17	PA	ARMSTRONG	PA17	6088
37005254300000	-79.5052	40.5707	31	31	1061	21	PA	ARMSTRONG	PA17	5930
37065200140000	-78.8764	40.9334	41	54	2326	14	PA	JEFFERSON	PA17	6963
37065245960000	-78.8303	40.9786	29	29	1049	19	PA	JEFFERSON	PA17	6327
37003212540000	-79.7238	40.5359	31	34	1253	18	PA	ALLEGHENY	PA17	5495
37063204780000	-78.9847	40.8443	68	81	2271	26	PA	INDIANA	PA17	6782
37005249190000	-79.3575	40.6825	33	33	1088	22	PA	ARMSTRONG	PA17	5981
37005259580000	-79.4356	40.6078	27	28	1073	17	PA	ARMSTRONG	PA17	6184
37005255890000	-79.4621	40.5899	27	27	1088	16	PA	ARMSTRONG	PA17	6007
37129248860000	-79.6085	40.4977	31	32	1141	19	PA	WESTMORELAND	PA17	5768
37065247270000	-78.8108	40.9619	35	35	1058	25	PA	JEFFERSON	PA17	6588
37033251680000	-78.7797	40.9555	30	29	981	21	PA	CLEARFIELD	PA17	6560
37005212600000	-79.5178	40.5498	32	33	1084	21	PA	ARMSTRONG	PA17	5961
37003211640000	-79.7911	40.3976	31	33	1160	19	PA	ALLEGHENY	PA17	5990
37005201960000	-79.4281	40.6156	32	32	1075	21	PA	ARMSTRONG	PA17	6207
37129240450000	-79.5460	40.5389	29	31	1127	18	PA	WESTMORELAND	PA17	5574
37005255880000	-79.4601	40.5929	24	24	1028	14	PA	ARMSTRONG	PA17	5925
37005246580000	-79.5220	40.5427	36	36	1023	27	PA	ARMSTRONG	PA17	5843
37003215580000	-79.7763	40.5039	34	36	1220	20	PA	ALLEGHENY	PA17	5678
37003212420000	-79.7425	40.4223	37	41	1380	20	PA	ALLEGHENY	PA17	6093
37005239160000	-79.4916	40.5713	29	31	1157	18	PA	ARMSTRONG	PA17	6106
37003212990000	-79.7238	40.5389	29	30	1159	17	PA	ALLEGHENY	PA17	5488
37129204220000	-79.5877	40.5242	63	76	2228	24	PA	WESTMORELAND	PA17	6045
37003212860000	-79.7336	40.5363	32	35	1225	19	PA	ALLEGHENY	PA17	5593
37005249950000	-79.3402	40.6864	30	31	1091	19	PA	ARMSTRONG	PA17	5977
37003212600000	-79.7852	40.3966	30	34	1388	15	PA	ALLEGHENY	PA17	5986
37003213710000	-79.7415	40.5176	31	33	1148	19	PA	ALLEGHENY	PA17	5612

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37065247760000	-78.8086	40.9707	29	30	1067	19	PA	JEFFERSON	PA17	6624
37003215590000	-79.7811	40.5054	31	32	1136	19	PA	ALLEGHENY	PA17	5677
37005249200000	-79.3457	40.6847	30	31	1099	19	PA	ARMSTRONG	PA17	5962
37005246480000	-79.5182	40.5443	27	28	1126	16	PA	ARMSTRONG	PA17	5968
37129245770000	-79.6433	40.4737	31	33	1173	19	PA	WESTMORELAND	PA17	5727
37003213130000	-79.7380	40.5282	31	33	1223	18	PA	ALLEGHENY	PA17	5549
37003212610000	-79.7823	40.3997	42	47	1391	24	PA	ALLEGHENY	PA17	5983
37005203500000	-79.3256	40.6854	30	27	850	25	PA	ARMSTRONG	PA17	5955
37129247380000	-79.6373	40.4811	30	31	1137	18	PA	WESTMORELAND	PA17	5735
37005246690000	-79.5189	40.5427	27	27	1024	18	PA	ARMSTRONG	PA17	5841
37003212500000	-79.7380	40.5184	29	31	1227	16	PA	ALLEGHENY	PA17	5585
37065243800000	-78.8433	40.9239	26	27	1093	16	PA	JEFFERSON	PA17	6740
37005249100000	-79.3034	40.6869	30	31	1108	19	PA	ARMSTRONG	PA17	6169
37065247250000	-78.8079	40.9688	28	29	1085	18	PA	JEFFERSON	PA17	6631
37005207500000	-79.3773	40.6674	25	25	1024	16	PA	ARMSTRONG	PA17	6105
37065247780000	-78.8080	40.9617	31	31	1045	21	PA	JEFFERSON	PA17	6620
37125200820000	-80.1611	40.1135	81	94	2333	31	PA	WASHINGTON	PA17	6496
37003215500000	-79.7935	40.4692	30	31	1144	18	PA	ALLEGHENY	PA17	5993
37003214500000	-79.7654	40.4020	27	26	974	18	PA	ALLEGHENY	PA17	6006
37003213450000	-79.7503	40.5207	29	31	1132	18	PA	ALLEGHENY	PA17	5594
37005246500000	-79.5150	40.5441	28	28	1043	18	PA	ARMSTRONG	PA17	5852
37005249540000	-79.5274	40.6453	29	31	1147	18	PA	ARMSTRONG	PA17	5602
37005249120000	-79.5307	40.6442	26	27	1101	16	PA	ARMSTRONG	PA17	5573
37005222850000	-79.4053	40.6392	32	32	1019	23	PA	ARMSTRONG	PA17	6049
37005209310000	-79.3377	40.6831	36	36	1113	24	PA	ARMSTRONG	PA17	6035
37033250770000	-78.8038	40.9474	31	30	1032	21	PA	CLEARFIELD	PA17	6674
37033250260000	-78.7979	40.9472	26	26	1020	17	PA	CLEARFIELD	PA17	6707
37065247720000	-78.8055	40.9629	30	30	1048	20	PA	JEFFERSON	PA17	6651
37033248700000	-78.7731	40.9536	25	26	1090	15	PA	CLEARFIELD	PA17	6501
37065249210000	-78.8079	40.9759	28	28	1017	19	PA	JEFFERSON	PA17	6629
37003212620000	-79.7774	40.3970	36	40	1389	19	PA	ALLEGHENY	PA17	5980
37065247770000	-78.8048	40.9687	31	31	1051	21	PA	JEFFERSON	PA17	6666
37033249880000	-78.7822	40.9709	27	26	965	19	PA	CLEARFIELD	PA17	6601
37005243340000	-79.5121	40.5476	26	26	1111	15	PA	ARMSTRONG	PA17	5979
37003213420000	-79.7424	40.5203	28	30	1170	17	PA	ALLEGHENY	PA17	5605
37129248810000	-79.6079	40.4894	30	31	1104	19	PA	WESTMORELAND	PA17	5776
37005246490000	-79.5113	40.5452	31	31	1062	20	PA	ARMSTRONG	PA17	5908
37129248230000	-79.6304	40.4821	28	28	1087	17	PA	WESTMORELAND	PA17	5744
37003213510000	-79.7453	40.5279	32	34	1147	20	PA	ALLEGHENY	PA17	5587

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37005204370000	-79.3101	40.6799	22	21	921	14	PA	ARMSTRONG	PA17	6153
37129250090000	-79.6145	40.4866	30	31	1135	19	PA	WESTMORELAND	PA17	5770
37005223740000	-79.3858	40.6598	31	30	1038	21	PA	ARMSTRONG	PA17	6089
37065248860000	-78.8252	40.9279	28	27	980	19	PA	JEFFERSON	PA17	6774
37003213080000	-79.7749	40.3912	39	43	1402	21	PA	ALLEGHENY	PA17	6006
37005246680000	-79.5093	40.5426	29	29	1037	20	PA	ARMSTRONG	PA17	5866
37003214560000	-79.7569	40.5211	29	31	1134	18	PA	ALLEGHENY	PA17	5588
37129247390000	-79.6268	40.4822	31	33	1198	18	PA	WESTMORELAND	PA17	5749
37129232180000	-79.6035	40.4898	39	42	1224	25	PA	WESTMORELAND	PA17	5775
37005247340000	-79.3495	40.6685	35	36	1118	23	PA	ARMSTRONG	PA17	6079
37033248750000	-78.7681	40.9533	27	28	1090	17	PA	CLEARFIELD	PA17	6492
37129244250000	-79.6294	40.4794	30	31	1107	19	PA	WESTMORELAND	PA17	5746
37033250660000	-78.8031	40.9403	28	28	995	19	PA	CLEARFIELD	PA17	6723
37005206200000	-79.3997	40.6306	73	86	2312	28	PA	ARMSTRONG	PA17	6098
37033250270000	-78.7883	40.9417	27	27	1011	18	PA	CLEARFIELD	PA17	6703
37065247330000	-78.8186	40.9300	27	27	1010	18	PA	JEFFERSON	PA17	6775
37005243320000	-79.5081	40.5467	30	30	1073	20	PA	ARMSTRONG	PA17	5959
37003200460000	-79.7365	40.4002	72	86	2409	26	PA	ALLEGHENY	PA17	6057
37125200700000	-80.1431	40.0981	73	87	2479	26	PA	WASHINGTON	PA17	6642
37005247330000	-79.3467	40.6705	33	35	1134	21	PA	ARMSTRONG	PA17	6105
37065236190000	-78.9631	41.0175	28	29	1120	17	PA	JEFFERSON	PA17	5464
37065248260000	-78.8178	40.9274	28	28	1038	18	PA	JEFFERSON	PA17	6781
37003213250000	-79.7461	40.5252	33	35	1162	21	PA	ALLEGHENY	PA17	5605
37129250080000	-79.6227	40.4809	28	28	1020	19	PA	WESTMORELAND	PA17	5758
37005246670000	-79.5068	40.5385	27	25	952	19	PA	ARMSTRONG	PA17	5883
37003213140000	-79.7707	40.3901	33	37	1372	17	PA	ALLEGHENY	PA17	6001
37065249330000	-78.8147	40.9266	29	28	955	21	PA	JEFFERSON	PA17	6783
37129247910000	-79.6323	40.4650	30	31	1134	19	PA	WESTMORELAND	PA17	5753
37005245270000	-79.4644	40.5610	34	36	1173	22	PA	ARMSTRONG	PA17	6185
37005230000000	-79.3824	40.6562	30	31	1128	19	PA	ARMSTRONG	PA17	6115
37129250070000	-79.5642	40.5134	29	30	1091	18	PA	WESTMORELAND	PA17	5751
37065246950000	-78.8091	40.9311	27	27	1008	18	PA	JEFFERSON	PA17	6774
37065246960000	-78.8111	40.9290	27	26	999	18	PA	JEFFERSON	PA17	6779
37129243600000	-79.5769	40.5038	29	31	1231	16	PA	WESTMORELAND	PA17	5776
37005247320000	-79.3429	40.6699	32	33	1117	21	PA	ARMSTRONG	PA17	6105
37063201240000	-78.8691	40.9040	28	29	1066	18	PA	INDIANA	PA17	7164
37129203680000	-79.6674	40.4568	61	73	2261	23	PA	WESTMORELAND	PA17	6057
37003213220000	-79.7727	40.3840	33	39	1466	17	PA	ALLEGHENY	PA17	6068
37065248020000	-78.8097	40.9269	26	25	937	18	PA	JEFFERSON	PA17	6784

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37129247370000	-79.6275	40.4729	29	31	1128	18	PA	WESTMORELAND	PA17	5755
37063242210000	-79.1287	40.7473	33	31	898	27	PA	INDIANA	PA17	6117
37065248790000	-78.8057	40.9287	28	27	988	19	PA	JEFFERSON	PA17	6780
37003212010000	-79.7741	40.3736	30	30	1070	20	PA	ALLEGHENY	PA17	6080
37129204730000	-79.6859	40.4469	74	87	2253	29	PA	WESTMORELAND	PA17	5778
37005246780000	-79.3218	40.6739	36	36	1100	24	PA	ARMSTRONG	PA17	6063
37063322010000	-79.3057	40.6590	28	29	1130	17	PA	INDIANA	PA17	5828
37065247370000	-78.8104	40.9878	28	28	1013	19	PA	JEFFERSON	PA17	6525
37063202830000	-78.9876	40.8127	62	75	2212	24	PA	INDIANA	PA17	7025
37129245890000	-79.5955	40.4920	29	31	1164	18	PA	WESTMORELAND	PA17	5772
37063332230000	-79.2982	40.6469	31	32	1158	19	PA	INDIANA	PA17	5835
37063204610000	-78.8866	40.8906	68	82	2329	25	PA	INDIANA	PA17	7221
37063217850000	-78.9824	40.8079	32	31	1017	22	PA	INDIANA	PA17	7128
37059217950000	-80.2360	39.9890	39	47	1709	18	PA	GREENE	PA17	6643
37033250630000	-78.7094	40.9383	28	28	1002	19	PA	CLEARFIELD	PA17	6185
37033249090000	-78.8035	40.9263	28	27	981	19	PA	CLEARFIELD	PA17	6787
37129204380000	-79.6997	40.4161	67	81	2377	24	PA	WESTMORELAND	PA17	6125
37129247500000	-79.6270	40.4684	32	34	1145	20	PA	WESTMORELAND	PA17	5754
37059217340000	-80.2000	39.9763	42	49	1625	20	PA	GREENE	PA17	6471
37033251140000	-78.8018	40.9311	26	24	964	17	PA	CLEARFIELD	PA17	6772
37063334630000	-79.3007	40.6444	31	33	1217	18	PA	INDIANA	PA17	5823
37129247900000	-79.6240	40.4721	32	33	1134	20	PA	WESTMORELAND	PA17	5757
37005207870000	-79.4909	40.5476	34	34	1033	24	PA	ARMSTRONG	PA17	6128
37005250710000	-79.4951	40.5507	28	29	1119	17	PA	ARMSTRONG	PA17	6109
37129250810000	-79.5976	40.4876	31	33	1211	18	PA	WESTMORELAND	PA17	5766
37059218200000	-80.1975	39.9673	47	54	1600	24	PA	GREENE	PA17	6520
37003213160000	-79.8516	40.2926	32	35	1284	18	PA	ALLEGHENY	PA17	6327
37003216080000	-79.9486	40.2668	28	29	1104	17	PA	ALLEGHENY	PA17	6905
37059216800000	-80.2032	39.9786	43	50	1600	21	PA	GREENE	PA17	6439
37005242060000	-79.5027	40.5501	32	33	1111	21	PA	ARMSTRONG	PA17	6062
37005207320000	-79.3299	40.6717	41	44	1265	25	PA	ARMSTRONG	PA17	6039
37005222170000	-79.3587	40.6554	34	33	992	25	PA	ARMSTRONG	PA17	6047
37063336070000	-78.9014	40.8249	38	46	1714	17	PA	INDIANA	PA17	7234
37003208890000	-79.8953	40.2864	26	22	778	22	PA	ALLEGHENY	PA17	6569
37063200500000	-79.2384	40.6422	81	95	2410	30	PA	INDIANA	PA17	6548
37059216810000	-80.2034	39.9609	50	58	1705	24	PA	GREENE	PA17	6855
37059217980000	-80.2408	39.9695	43	51	1707	20	PA	GREENE	PA17	6627
37129241200000	-79.6425	40.4471	28	27	971	20	PA	WESTMORELAND	PA17	5775
37059217650000	-80.2146	39.9563	48	55	1676	23	PA	GREENE	PA17	6868

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37063291710000	-79.0339	40.7709	30	30	1083	19	PA	INDIANA	PA17	6650
37059217800000	-80.2119	39.9523	48	56	1686	23	PA	GREENE	PA17	6537
37059217600000	-80.2115	39.9594	42	50	1729	19	PA	GREENE	PA17	6889
37033251690000	-78.7317	40.9231	29	29	1046	19	PA	CLEARFIELD	PA17	6717
37063296350000	-79.1259	40.7366	32	33	1149	20	PA	INDIANA	PA17	6177
37059217900000	-80.2139	39.9885	51	59	1737	24	PA	GREENE	PA17	6651
37059217810000	-80.2077	39.9624	38	46	1690	17	PA	GREENE	PA17	6854
37033250370000	-78.7603	40.9261	27	26	960	19	PA	CLEARFIELD	PA17	6856
37063330180000	-79.3198	40.6229	30	32	1223	17	PA	INDIANA	PA17	5759
37033252430000	-78.7444	40.9271	26	25	1027	16	PA	CLEARFIELD	PA17	6823
37033250390000	-78.7338	40.9278	28	28	1066	18	PA	CLEARFIELD	PA17	6730
37033250170000	-78.7482	40.9305	27	26	992	18	PA	CLEARFIELD	PA17	6825
37059218230000	-80.2124	39.9631	48	56	1683	23	PA	GREENE	PA17	6454
37129242250000	-79.6855	40.4122	27	28	1128	16	PA	WESTMORELAND	PA17	5756
37033250400000	-78.7385	40.9208	27	26	982	18	PA	CLEARFIELD	PA17	6793
37033251640000	-78.7650	40.9294	29	28	908	23	PA	CLEARFIELD	PA17	6834
37063202960000	-78.8713	40.8298	79	93	2416	29	PA	INDIANA	PA17	7298
37063336530000	-78.8686	40.8491	32	32	1051	22	PA	INDIANA	PA17	6736
37033250190000	-78.7573	40.9377	31	30	983	22	PA	CLEARFIELD	PA17	6788
37033250140000	-78.7678	40.9423	29	30	1091	18	PA	CLEARFIELD	PA17	6709
37033252530000	-78.7408	40.9198	28	27	982	19	PA	CLEARFIELD	PA17	6812
37033253470000	-78.7327	40.9193	28	28	1019	19	PA	CLEARFIELD	PA17	6734
37059217760000	-80.2142	39.9682	43	50	1666	20	PA	GREENE	PA17	6412
37059218210000	-80.1927	39.9682	46	54	1665	22	PA	GREENE	PA17	6552
37059216700000	-80.2027	39.9854	47	55	1712	22	PA	GREENE	PA17	6781
37125220230000	-80.0796	40.1202	41	43	1223	26	PA	WASHINGTON	PA17	6417
37005018670000	-79.5040	40.5446	34	35	1097	23	PA	ARMSTRONG	PA17	5992
37033253220000	-78.7362	40.9303	31	30	972	23	PA	CLEARFIELD	PA17	6744
37063296220000	-79.1269	40.7272	34	36	1156	22	PA	INDIANA	PA17	6219
37125220240000	-80.0850	40.1157	32	35	1269	18	PA	WASHINGTON	PA17	6417
37033200110000	-78.7790	40.9366	73	86	2306	28	PA	CLEARFIELD	PA17	7396
37059217290000	-80.1988	39.9600	47	54	1627	23	PA	GREENE	PA17	6538
37129205320000	-79.6995	40.4046	72	87	2515	25	PA	WESTMORELAND	PA17	6082
37003214630000	-79.7608	40.5276	25	27	1223	13	PA	ALLEGHENY	PA17	5581
37059217370000	-80.2063	39.9531	43	52	1754	20	PA	GREENE	PA17	6988
37033252600000	-78.7686	40.9383	28	28	1011	19	PA	CLEARFIELD	PA17	6765
37059248910000	-80.2124	39.9339	37	45	1781	16	PA	GREENE	PA17	6982
37129250930000	-79.6121	40.4706	34	36	1258	20	PA	WESTMORELAND	PA17	5748
37033250240000	-78.7902	40.9312	31	29	955	23	PA	CLEARFIELD	PA17	6769

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37059223620000	-80.2784	39.9205	27	23	733	25	PA	GREENE	PA17	6246
37033250200000	-78.7730	40.9293	28	28	992	19	PA	CLEARFIELD	PA17	6813
37033249680000	-78.7118	40.9212	31	31	1086	20	PA	CLEARFIELD	PA17	6365
37033250550000	-78.7767	40.9093	27	27	1020	18	PA	CLEARFIELD	PA17	6820
37033251350000	-78.7966	40.9302	27	26	956	19	PA	CLEARFIELD	PA17	6774
37063220380000	-79.0301	40.7689	55	68	2350	20	PA	INDIANA	PA17	7172
37003212300000	-79.8667	40.2521	34	38	1337	19	PA	ALLEGHENY	PA17	6968
37003213180000	-79.8246	40.2878	29	33	1299	16	PA	ALLEGHENY	PA17	6348
37125220220000	-80.0817	40.1168	39	42	1269	24	PA	WASHINGTON	PA17	6434
37033253450000	-78.7457	40.9141	27	27	1008	18	PA	CLEARFIELD	PA17	6838
37033249820000	-78.7359	40.9140	28	28	1017	19	PA	CLEARFIELD	PA17	6767
37063272470000	-78.8543	40.8144	30	30	1037	20	PA	INDIANA	PA17	6774
37063326720000	-79.1052	40.7286	29	30	1105	19	PA	INDIANA	PA17	6289
37005246660000	-79.4920	40.5399	31	32	1131	20	PA	ARMSTRONG	PA17	6074
37129250530000	-79.5109	40.5117	24	26	1217	12	PA	WESTMORELAND	PA17	5750
37063201610000	-79.2867	40.6017	74	88	2383	27	PA	INDIANA	PA17	6559
37059224940000	-80.2714	39.9208	28	23	694	27	PA	GREENE	PA17	6275
37063327520000	-78.9086	40.7922	30	35	1474	14	PA	INDIANA	PA17	6749
37129217210000	-79.7491	40.3474	34	37	1249	20	PA	WESTMORELAND	PA17	5770
37059217300000	-80.1969	39.9556	43	51	1720	20	PA	GREENE	PA17	6985
37005241410000	-79.4985	40.5460	28	29	1093	18	PA	ARMSTRONG	PA17	6070
37005246810000	-79.4950	40.5348	32	34	1219	19	PA	ARMSTRONG	PA17	6053
37129251000000	-79.6090	40.4728	30	32	1194	18	PA	WESTMORELAND	PA17	5749
37129243540000	-79.6707	40.3981	31	33	1192	19	PA	WESTMORELAND	PA17	5810
37129237300000	-79.6143	40.4530	27	24	854	21	PA	WESTMORELAND	PA17	5769
37059218890000	-80.1906	39.9646	66	73	1664	34	PA	GREENE	PA17	6578
37063329510000	-79.3327	40.6106	25	28	1281	12	PA	INDIANA	PA17	5781
37125220210000	-80.0779	40.1152	27	24	853	21	PA	WASHINGTON	PA17	6484
37005245240000	-79.4737	40.5431	31	32	1152	19	PA	ARMSTRONG	PA17	6132
37059218100000	-80.1906	39.9620	44	52	1704	21	PA	GREENE	PA17	6893
37003212290000	-79.8789	40.2401	32	35	1280	18	PA	ALLEGHENY	PA17	6979
37063201490000	-79.2511	40.6085	78	91	2191	32	PA	INDIANA	PA17	6691
37129242490000	-79.5964	40.4687	24	21	808	19	PA	WESTMORELAND	PA17	5741
37063314970000	-79.2211	40.6116	33	35	1190	20	PA	INDIANA	PA17	6326
37059217500000	-80.1915	39.9561	45	52	1661	22	PA	GREENE	PA17	6599
37063308000000	-79.2931	40.5959	32	33	1112	20	PA	INDIANA	PA17	6129
37059216850000	-80.1651	39.9836	51	58	1711	24	PA	GREENE	PA17	6682
37065247340000	-78.8081	40.9823	29	29	1025	20	PA	JEFFERSON	PA17	6602
37059218170000	-80.1824	39.9701	41	49	1719	18	PA	GREENE	PA17	7001

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37059234200000	-80.3382	39.9097	43	52	1814	19	PA	GREENE	PA17	6573
37065247380000	-78.8060	40.9868	29	28	1012	20	PA	JEFFERSON	PA17	6579
37059234650000	-80.3502	39.8960	40	48	1748	18	PA	GREENE	PA17	6750
37065247350000	-78.8050	40.9812	24	24	1053	14	PA	JEFFERSON	PA17	6636
37021200450000	-78.7062	40.7011	35	36	1138	23	PA	CAMBRIA	PA17	7449
37065249980000	-78.8047	40.9828	28	28	1028	19	PA	JEFFERSON	PA17	6627
37065247470000	-78.8052	40.9842	32	32	1028	23	PA	JEFFERSON	PA17	6612
37059218870000	-80.1759	39.9632	39	45	1495	20	PA	GREENE	PA17	6678
37059218220000	-80.1633	39.9719	41	49	1783	18	PA	GREENE	PA17	7124
37021203430000	-78.7405	40.6469	31	32	1172	18	PA	CAMBRIA	PA17	7645
37059234690000	-80.3485	39.9017	50	58	1762	23	PA	GREENE	PA17	6713
37063200310000	-79.2792	40.5824	82	95	2370	31	PA	INDIANA	PA17	6646
37125232630000	-80.0106	40.1014	46	53	1680	22	PA	WASHINGTON	PA17	7531
37059216910000	-80.1656	39.9609	53	62	1803	24	PA	GREENE	PA17	6737
37129250940000	-79.5754	40.4174	23	19	734	20	PA	WESTMORELAND	PA17	5905
37003209800000	-79.9002	40.1972	72	85	2290	28	PA	ALLEGHENY	PA17	7060
37021203040000	-78.7983	40.6972	30	30	1048	20	PA	CAMBRIA	PA17	7720
37063332820000	-79.4199	40.5094	22	24	1181	11	PA	INDIANA	PA17	5889
37063274890000	-79.3321	40.5414	77	90	2383	28	PA	INDIANA	PA17	6558
37063252830000	-79.0694	40.6624	66	80	2411	24	PA	INDIANA	PA17	7106
37063211170000	-79.1250	40.6250	35	33	919	28	PA	INDIANA	PA17	7102
37021202180000	-78.7989	40.7004	32	32	1056	22	PA	CAMBRIA	PA17	7736
37063200530000	-79.3061	40.5688	33	34	1076	23	PA	INDIANA	PA17	6511
37063329560000	-79.4177	40.5074	26	30	1311	13	PA	INDIANA	PA17	5937
37021206470000	-78.8263	40.6770	33	34	1148	21	PA	CAMBRIA	PA17	7863
37063263170000	-78.9652	40.6952	71	85	2371	26	PA	INDIANA	PA17	7215
37021203070000	-78.7902	40.7009	32	33	1124	21	PA	CAMBRIA	PA17	7798
37021203200000	-78.7644	40.7151	31	33	1158	19	PA	CAMBRIA	PA17	7800
37021203220000	-78.7578	40.7143	30	31	1121	19	PA	CAMBRIA	PA17	7787
37129243880000	-79.4670	40.4811	31	34	1281	17	PA	WESTMORELAND	PA17	6018
37063250730000	-79.1859	40.5789	83	97	2393	31	PA	INDIANA	PA17	7258
37129236380000	-79.5005	40.4189	26	22	726	24	PA	WESTMORELAND	PA17	6371
37129247300000	-79.7225	40.2859	32	34	1201	19	PA	WESTMORELAND	PA17	6277
37021202880000	-78.7814	40.7135	31	32	1121	19	PA	CAMBRIA	PA17	7767
37063270040000	-78.9854	40.6773	51	66	2512	17	PA	INDIANA	PA17	7236
37063334410000	-78.9540	40.6599	33	38	1415	17	PA	INDIANA	PA17	6800
37063283440000	-78.8501	40.6828	76	91	2578	26	PA	INDIANA	PA17	7731
37063320410000	-78.9459	40.6983	41	46	1461	22	PA	INDIANA	PA17	6743
37021204240000	-78.7771	40.7125	32	33	1169	19	PA	CAMBRIA	PA17	7765

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37021202210000	-78.7922	40.7035	30	32	1171	18	PA	CAMBRIA	PA17	7842
37021202230000	-78.8028	40.6987	29	29	1020	20	PA	CAMBRIA	PA17	7701
37063275580000	-78.8600	40.6713	84	99	2548	29	PA	INDIANA	PA17	7707
37063261930000	-78.9752	40.6836	61	75	2345	22	PA	INDIANA	PA17	7219
37021201620000	-78.7731	40.7138	31	33	1206	18	PA	CAMBRIA	PA17	7790
37063320140000	-78.9358	40.7068	41	47	1502	21	PA	INDIANA	PA17	6763
37021201840000	-78.7585	40.7198	28	29	1095	18	PA	CAMBRIA	PA17	7750
37021205280000	-78.8073	40.7198	27	28	1131	16	PA	CAMBRIA	PA17	7671
37063322030000	-78.8788	40.7117	36	41	1419	19	PA	INDIANA	PA17	6787
37063203000000	-79.1300	40.5559	69	82	2356	25	PA	INDIANA	PA17	7424
37063323110000	-78.8657	40.7281	38	43	1499	19	PA	INDIANA	PA17	6759
37021200780000	-78.8135	40.6965	68	83	2537	23	PA	CAMBRIA	PA17	7765
37033203870000	-78.7646	40.7403	68	83	2544	23	PA	CLEARFIELD	PA17	7696
37063328430000	-78.9416	40.6993	37	42	1493	19	PA	INDIANA	PA17	6752
37063323140000	-78.8534	40.7269	36	43	1622	17	PA	INDIANA	PA17	6785
37021202360000	-78.7720	40.7204	33	35	1178	21	PA	CAMBRIA	PA17	7820
37129221590000	-79.4912	40.4138	34	36	1234	20	PA	WESTMORELAND	PA17	6484
37063251510000	-78.8245	40.7138	73	89	2608	25	PA	INDIANA	PA17	7586
37063332600000	-79.3851	40.5185	36	38	1209	22	PA	INDIANA	PA17	6237
37063323560000	-78.8623	40.7277	39	45	1509	20	PA	INDIANA	PA17	6764
37063295000000	-78.9020	40.6440	62	76	2512	21	PA	INDIANA	PA17	7596
37063203970000	-79.1157	40.5605	63	76	2341	23	PA	INDIANA	PA17	7443
37129229100000	-79.5715	40.3804	62	75	2385	22	PA	WESTMORELAND	PA17	6574
37021205270000	-78.8036	40.7181	31	32	1124	19	PA	CAMBRIA	PA17	7668
37021202940000	-78.7971	40.7060	36	36	1114	24	PA	CAMBRIA	PA17	7748
37021202830000	-78.7853	40.7064	33	35	1178	20	PA	CAMBRIA	PA17	7823
37021202220000	-78.7931	40.7063	32	33	1133	20	PA	CAMBRIA	PA17	7803
37063322450000	-79.0511	40.6137	29	28	1006	20	PA	INDIANA	PA17	6780
37129245160000	-79.7130	40.2894	34	37	1252	20	PA	WESTMORELAND	PA17	6274
37021205020000	-78.7897	40.7124	32	34	1144	20	PA	CAMBRIA	PA17	7760
37063203820000	-79.1130	40.5538	73	87	2346	27	PA	INDIANA	PA17	7577
37111200190000	-79.3875	39.8777	74	90	2589	25	PA	SOMERSET	PA17	8024
37063316810000	-78.8826	40.6820	39	45	1532	20	PA	INDIANA	PA17	6918
37021204880000	-78.8052	40.7133	35	36	1094	24	PA	CAMBRIA	PA17	7694
37021201830000	-78.7590	40.7237	31	32	1098	20	PA	CAMBRIA	PA17	7744
37063326080000	-78.8847	40.6843	34	39	1440	18	PA	INDIANA	PA17	6888
37063320220000	-78.9367	40.6988	47	52	1502	25	PA	INDIANA	PA17	6762
37063316970000	-78.8810	40.6786	38	44	1524	19	PA	INDIANA	PA17	6960
37063328440000	-78.9397	40.6705	33	39	1502	16	PA	INDIANA	PA17	6781

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37063319290000	-78.8831	40.6757	38	44	1515	19	PA	INDIANA	PA17	6968
37063315090000	-78.8792	40.6859	42	48	1527	22	PA	INDIANA	PA17	6906
37063324860000	-78.8498	40.7245	37	41	1406	20	PA	INDIANA	PA17	6805
37021203050000	-78.8005	40.7044	29	29	1031	20	PA	CAMBRIA	PA17	7712
37063326070000	-78.8804	40.6886	34	39	1438	18	PA	INDIANA	PA17	6878
37063243210000	-78.8830	40.6567	82	96	2510	29	PA	INDIANA	PA17	7608
37129235970000	-79.4626	40.4485	29	30	1144	17	PA	WESTMORELAND	PA17	6342
37063319330000	-78.8730	40.6923	41	47	1530	21	PA	INDIANA	PA17	6891
37063316870000	-78.8880	40.7052	46	52	1538	24	PA	INDIANA	PA17	6797
37063291670000	-78.8433	40.6929	75	90	2588	26	PA	INDIANA	PA17	7655
37063317570000	-78.8925	40.7016	38	44	1531	19	PA	INDIANA	PA17	6803
37063315080000	-78.8826	40.6935	41	47	1528	21	PA	INDIANA	PA17	6845
37129236850000	-79.4409	40.4737	29	30	1165	17	PA	WESTMORELAND	PA17	6315
37063271090000	-78.8366	40.7067	78	93	2583	27	PA	INDIANA	PA17	7521
37063319300000	-78.8791	40.6752	39	45	1529	20	PA	INDIANA	PA17	7003
37063322130000	-78.8708	40.7023	36	42	1531	18	PA	INDIANA	PA17	6832
37063324630000	-78.8534	40.7239	40	48	1706	18	PA	INDIANA	PA17	7253
37063324650000	-78.8728	40.6994	39	47	1669	18	PA	INDIANA	PA17	6842
37063317530000	-78.8889	40.7009	43	49	1537	22	PA	INDIANA	PA17	6809
37129227410000	-79.6406	40.3161	34	35	1073	24	PA	WESTMORELAND	PA17	6281
37063323810000	-78.8830	40.7046	34	39	1441	17	PA	INDIANA	PA17	6804
37033203650000	-78.7105	40.8015	76	90	2499	27	PA	CLEARFIELD	PA17	7305
37063324730000	-78.8793	40.7040	39	47	1687	18	PA	INDIANA	PA17	7316
37063324850000	-78.8492	40.7216	37	42	1385	20	PA	INDIANA	PA17	6819
37063323570000	-78.8798	40.7007	37	42	1440	19	PA	INDIANA	PA17	6821
37063311490000	-78.8576	40.7138	37	40	1225	23	PA	INDIANA	PA17	6820
37021201680000	-78.7430	40.7236	32	33	1109	20	PA	CAMBRIA	PA17	7709
37129223120000	-79.4946	40.4073	32	34	1212	19	PA	WESTMORELAND	PA17	6499
37063204750000	-79.0905	40.5960	54	67	2334	19	PA	INDIANA	PA17	7340
37063204210000	-79.1022	40.5730	74	87	2198	30	PA	INDIANA	PA17	7378
37125232080000	-79.9926	40.0850	43	51	1733	19	PA	WASHINGTON	PA17	7753
37129251010000	-79.8373	40.1653	24	26	1231	12	PA	WESTMORELAND	PA17	7577
37129204720000	-79.5603	40.3755	23	18	671	21	PA	WESTMORELAND	PA17	6676
37063200250000	-79.2871	40.5660	78	90	2250	31	PA	INDIANA	PA17	6636
37063206940000	-79.0305	40.6481	59	73	2394	21	PA	INDIANA	PA17	7215
37063200830000	-79.0990	40.5741	68	81	2283	26	PA	INDIANA	PA17	7436
37063335920000	-78.9537	40.6535	33	37	1405	17	PA	INDIANA	PA17	6838
37063265520000	-79.3116	40.5374	77	90	2359	29	PA	INDIANA	PA17	6700
37063221630000	-79.3015	40.5619	32	33	1140	20	PA	INDIANA	PA17	6246

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37021208380000	-78.8151	40.6732	29	30	1082	19	PA	CAMBRIA	PA17	7825
37021202710000	-78.7991	40.6888	29	30	1105	18	PA	CAMBRIA	PA17	7756
37129233830000	-79.4301	40.4415	34	37	1257	20	PA	WESTMORELAND	PA17	6734
37125216920000	-80.0134	40.0678	42	47	1419	23	PA	WASHINGTON	PA17	7360
37063295140000	-79.0477	40.6010	57	70	2379	20	PA	INDIANA	PA17	7350
37125231540000	-79.9808	40.0794	39	48	1790	17	PA	WASHINGTON	PA17	7872
37129223450000	-79.4889	40.4036	29	32	1242	16	PA	WESTMORELAND	PA17	6577
37063242010000	-79.3285	40.5211	60	74	2393	21	PA	INDIANA	PA17	6727
37129222390000	-79.4925	40.4027	32	34	1207	19	PA	WESTMORELAND	PA17	6552
37063319450000	-78.8879	40.6514	77	92	2562	26	PA	INDIANA	PA17	7628
37063335910000	-78.9510	40.6516	34	39	1376	18	PA	INDIANA	PA17	6855
37021201730000	-78.7458	40.7118	32	33	1142	20	PA	CAMBRIA	PA17	7792
37021204810000	-78.7352	40.7193	31	32	1131	20	PA	CAMBRIA	PA17	7717
37063204120000	-79.1045	40.5537	70	83	2314	26	PA	INDIANA	PA17	7618
37021203170000	-78.7853	40.6978	29	30	1084	19	PA	CAMBRIA	PA17	7761
37063256110000	-78.8955	40.6499	71	86	2542	24	PA	INDIANA	PA17	7588
37059231250000	-80.3676	39.8786	46	54	1766	21	PA	GREENE	PA17	6602
37129224020000	-79.4874	40.4001	32	34	1193	19	PA	WESTMORELAND	PA17	6615
37125201730000	-79.9467	40.1056	73	88	2590	25	PA	WASHINGTON	PA17	7925
37021208410000	-78.8216	40.6707	29	29	1097	18	PA	CAMBRIA	PA17	7847
37021202730000	-78.7914	40.6902	31	33	1163	19	PA	CAMBRIA	PA17	7803
37129241500000	-79.3977	40.4455	32	34	1235	18	PA	WESTMORELAND	PA17	6952
37021201720000	-78.7266	40.7228	30	31	1153	18	PA	CAMBRIA	PA17	7685
37021208400000	-78.8259	40.6700	27	28	1113	16	PA	CAMBRIA	PA17	7889
37063204260000	-79.1214	40.5293	73	86	2300	28	PA	INDIANA	PA17	7639
37033253480000	-78.7108	40.9344	29	28	949	21	PA	CLEARFIELD	PA17	6245
37059200540000	-80.1569	39.8732	68	81	2323	25	PA	GREENE	PA17	7143
37021208830000	-78.7646	40.6966	34	40	1458	17	PA	CAMBRIA	PA17	7816
37063214480000	-78.8333	40.6667	78	93	2546	27	PA	INDIANA	PA17	7897
37021208870000	-78.7599	40.6951	31	32	1137	19	PA	CAMBRIA	PA17	7780
37063213300000	-78.8517	40.6511	60	74	2451	21	PA	INDIANA	PA17	7869
37021205440000	-78.7982	40.6832	35	37	1161	23	PA	CAMBRIA	PA17	7815
37021204000000	-78.7269	40.6538	34	40	1526	16	PA	CAMBRIA	PA17	7659
37125231660000	-79.9478	40.0945	38	46	1737	17	PA	WASHINGTON	PA17	7986
37063235200000	-78.9053	40.6300	71	86	2517	25	PA	INDIANA	PA17	7700
37063234210000	-78.8773	40.6405	63	78	2547	21	PA	INDIANA	PA17	7822
37129242560000	-79.3890	40.4418	32	35	1281	18	PA	WESTMORELAND	PA17	7046
37051205230000	-79.7678	39.7382	67	80	2379	24	PA	FAYETTE	PA17	3053
37129244710000	-79.3901	40.4361	27	30	1265	14	PA	WESTMORELAND	PA17	7066

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37021203770000	-78.7685	40.6834	32	34	1191	19	PA	CAMBRIA	PA17	7795
37063235040000	-78.8898	40.6286	73	87	2526	25	PA	INDIANA	PA17	7816
37021207410000	-78.7985	40.6672	28	28	1032	19	PA	CAMBRIA	PA17	7714
37021202990000	-78.7190	40.7067	32	35	1234	19	PA	CAMBRIA	PA17	7685
37063214760000	-78.8745	40.6296	76	90	2468	27	PA	INDIANA	PA17	7820
37063228130000	-78.9136	40.6200	85	99	2480	31	PA	INDIANA	PA17	7719
37021206180000	-78.8018	40.6645	31	31	1056	21	PA	CAMBRIA	PA17	7742
37021203330000	-78.7319	40.6542	32	33	1115	20	PA	CAMBRIA	PA17	7655
37063214010000	-78.8634	40.6396	80	94	2472	29	PA	INDIANA	PA17	7857
37059200380000	-80.1460	39.8606	76	91	2639	25	PA	GREENE	PA17	7268
37021207830000	-78.7900	40.6643	31	32	1120	20	PA	CAMBRIA	PA17	7734
37021206790000	-78.8377	40.6454	31	33	1174	19	PA	CAMBRIA	PA17	7833
37063214580000	-78.8503	40.6416	82	98	2713	27	PA	INDIANA	PA17	7846
37129245720000	-79.3816	40.4393	29	32	1299	15	PA	WESTMORELAND	PA17	7110
37021202960000	-78.7148	40.7092	32	35	1235	19	PA	CAMBRIA	PA17	7650
37125201700000	-79.9313	40.0926	56	67	2083	22	PA	WASHINGTON	PA17	7669
37059200260000	-80.1310	39.8985	88	103	2454	32	PA	GREENE	PA17	7258
37129252640000	-79.3804	40.4422	24	27	1226	13	PA	WESTMORELAND	PA17	7100
37021200460000	-78.7192	40.6958	37	38	1143	24	PA	CAMBRIA	PA17	7577
37059227230000	-80.1531	39.8515	24	24	1034	14	PA	GREENE	PA17	6815
37021205930000	-78.8194	40.6560	36	36	1095	24	PA	CAMBRIA	PA17	7773
37129252050000	-79.4448	40.3745	26	29	1265	13	PA	WESTMORELAND	PA17	7107
37063300440000	-79.1230	40.4924	31	30	1034	21	PA	INDIANA	PA17	7326
37063230140000	-78.8974	40.6091	67	81	2473	23	PA	INDIANA	PA17	7860
37063322040000	-79.0652	40.5209	72	86	2472	25	PA	INDIANA	PA17	7231
37129247130000	-79.3690	40.4388	33	35	1231	19	PA	WESTMORELAND	PA17	7138
37129247140000	-79.3721	40.4402	31	33	1241	17	PA	WESTMORELAND	PA17	7132
37059236660000	-80.1014	39.9086	39	48	1787	17	PA	GREENE	PA17	7480
37059247570000	-80.0720	39.9239	54	62	1707	27	PA	GREENE	PA17	7553
37063228880000	-78.9512	40.5930	70	85	2477	25	PA	INDIANA	PA17	7710
37129244480000	-79.4396	40.3621	27	30	1280	14	PA	WESTMORELAND	PA17	7192
37051212760000	-79.7367	40.0814	28	27	975	20	PA	FAYETTE	PA17	7756
37129204050000	-79.4577	40.3092	69	82	2298	26	PA	WESTMORELAND	PA17	7569
37129205080000	-79.6688	40.1540	63	77	2331	23	PA	WESTMORELAND	PA17	8074
37125230280000	-80.0111	40.0040	38	47	1775	17	PA	WASHINGTON	PA17	8000
37129203570000	-79.3022	40.4312	73	87	2347	27	PA	WESTMORELAND	PA17	7636
37051212530000	-79.7387	40.0776	25	24	966	17	PA	FAYETTE	PA17	7758
37059217930000	-80.1704	39.8158	47	56	1765	22	PA	GREENE	PA17	7256
37129208060000	-79.6592	40.1677	56	69	2279	20	PA	WESTMORELAND	PA17	7922

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37063324710000	-79.0614	40.5178	40	45	1450	21	PA	INDIANA	PA17	7238
37021207010000	-78.8126	40.6569	32	32	1051	22	PA	CAMBRIA	PA17	7703
37129246870000	-79.4286	40.3772	30	32	1224	17	PA	WESTMORELAND	PA17	7192
37129243130000	-79.4767	40.2900	29	30	1117	18	PA	WESTMORELAND	PA17	7206
37063317620000	-78.8747	40.6217	78	93	2599	27	PA	INDIANA	PA17	7860
37129203880000	-79.5170	40.2697	74	89	2547	25	PA	WESTMORELAND	PA17	7538
37059217890000	-80.1906	39.8099	51	60	1826	23	PA	GREENE	PA17	7528
37125230270000	-80.0155	40.0016	40	49	1793	17	PA	WASHINGTON	PA17	8018
37129200340000	-79.6756	40.1433	72	86	2440	26	PA	WESTMORELAND	PA17	8113
37059248500000	-80.0689	39.9223	44	51	1680	21	PA	GREENE	PA17	7570
37051212080000	-79.7355	40.0775	24	23	977	15	PA	FAYETTE	PA17	7758
37111201630000	-79.1549	40.1385	72	87	2719	23	PA	SOMERSET	PA17	7864
37051211780000	-79.7416	40.0714	25	24	996	16	PA	FAYETTE	PA17	7758
37051217370000	-79.9321	39.9923	34	36	1182	21	PA	FAYETTE	PA17	7738
37129204160000	-79.4666	40.3022	77	91	2431	28	PA	WESTMORELAND	PA17	7620
37051212790000	-79.7492	40.0633	28	27	1043	18	PA	FAYETTE	PA17	7755
37129245130000	-79.4371	40.3709	25	27	1224	13	PA	WESTMORELAND	PA17	7171
37063314720000	-79.2193	40.4782	34	37	1252	20	PA	INDIANA	PA17	7638
37063215630000	-78.9391	40.6013	73	87	2511	25	PA	INDIANA	PA17	7720
37129244490000	-79.4363	40.3635	28	31	1279	14	PA	WESTMORELAND	PA17	7202
37129204080000	-79.4368	40.3292	63	77	2379	23	PA	WESTMORELAND	PA17	7689
37059218450000	-80.1854	39.8107	50	59	1824	22	PA	GREENE	PA17	7503
37051212780000	-79.7463	40.0651	29	29	1043	20	PA	FAYETTE	PA17	7755
37063236380000	-78.9737	40.5689	71	86	2521	25	PA	INDIANA	PA17	7742
37129244180000	-79.3651	40.4306	27	29	1205	15	PA	WESTMORELAND	PA17	7165
37063314730000	-79.2451	40.4554	33	36	1224	20	PA	INDIANA	PA17	7649
37129243670000	-79.4662	40.3007	34	36	1131	23	PA	WESTMORELAND	PA17	7209
37129243570000	-79.6658	40.1462	28	28	1071	18	PA	WESTMORELAND	PA17	7737
37059217940000	-80.1855	39.8057	53	61	1727	25	PA	GREENE	PA17	7180
37129250910000	-79.4342	40.3544	31	33	1194	19	PA	WESTMORELAND	PA17	7239
37129244230000	-79.3621	40.4287	34	36	1234	20	PA	WESTMORELAND	PA17	7169
37051215790000	-79.7794	40.0179	39	42	1298	23	PA	FAYETTE	PA17	7758
37051211800000	-79.7232	40.0862	27	26	930	20	PA	FAYETTE	PA17	7753
37059217910000	-80.1683	39.8117	49	57	1766	23	PA	GREENE	PA17	6985
37063321630000	-78.8690	40.6201	60	75	2559	20	PA	INDIANA	PA17	7828
37129237030000	-79.6162	40.1623	29	31	1244	16	PA	WESTMORELAND	PA17	7497
37063316920000	-79.2176	40.4689	32	34	1195	19	PA	INDIANA	PA17	7722
37129203960000	-79.4480	40.3182	72	86	2380	27	PA	WESTMORELAND	PA17	7653
37063229690000	-78.9640	40.5778	74	89	2497	26	PA	INDIANA	PA17	7765

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37051215540000	-79.6970	40.0944	31	29	918	23	PA	FAYETTE	PA17	7749
37063311800000	-79.2210	40.4639	38	40	1207	24	PA	INDIANA	PA17	7750
37051212600000	-79.7416	40.0664	29	29	1012	20	PA	FAYETTE	PA17	7757
37051203620000	-79.7749	39.8600	42	49	1699	19	PA	FAYETTE	PA17	8112
37051201210000	-79.5695	39.8640	75	89	2401	27	PA	FAYETTE	PA17	7614
37051215810000	-79.9133	39.9494	32	36	1320	18	PA	FAYETTE	PA17	7744
37051210740000	-79.8861	39.9031	32	35	1255	18	PA	FAYETTE	PA17	7840
37051205380000	-79.6717	39.8296	48	60	2114	19	PA	FAYETTE	PA17	7952
37051201440000	-79.5791	39.8335	73	87	2426	26	PA	FAYETTE	PA17	7396
37051205440000	-79.6661	39.8404	51	63	2162	19	PA	FAYETTE	PA17	8014
37051212630000	-79.9011	39.9454	24	29	1376	11	PA	FAYETTE	PA17	7748
37051211320000	-79.8777	39.9115	33	36	1219	20	PA	FAYETTE	PA17	7838
37051210760000	-79.9045	39.9035	33	36	1223	20	PA	FAYETTE	PA17	7763
37051216840000	-79.9061	39.8656	32	35	1278	18	PA	FAYETTE	PA17	7764
37051211970000	-79.8885	39.9003	32	34	1199	19	PA	FAYETTE	PA17	7829
37051200200000	-79.4348	39.8569	74	86	2070	32	PA	FAYETTE	PA17	7763
37051212520000	-79.8495	39.9480	24	26	1239	12	PA	FAYETTE	PA17	7739
37051211980000	-79.9002	39.8998	37	39	1192	23	PA	FAYETTE	PA17	7776
37051209780000	-79.8838	39.9255	31	33	1239	17	PA	FAYETTE	PA17	7774
37051203710000	-79.8941	39.9102	46	54	1747	21	PA	FAYETTE	PA17	8159
37051202510000	-79.8288	39.8464	79	95	2624	27	PA	FAYETTE	PA17	8301
37051001130000	-79.6737	39.8346	54	66	2146	21	PA	FAYETTE	PA17	8010
37051213580000	-79.8443	39.9538	32	36	1372	17	PA	FAYETTE	PA17	7739
37129216820000	-79.4102	40.3544	65	78	2270	25	PA	WESTMORELAND	PA17	7269
37129204370000	-79.2284	40.1249	76	90	2543	26	PA	WESTMORELAND	PA17	7257
37129232670000	-79.3496	40.3784	34	36	1169	22	PA	WESTMORELAND	PA17	7312
37021200400000	-78.9436	40.4160	61	75	2441	21	PA	CAMBRIA	PA17	7983
37051210790000	-79.8848	39.9300	31	33	1224	18	PA	FAYETTE	PA17	7758
37051208150000	-79.6655	39.8431	57	69	2121	23	PA	FAYETTE	PA17	8022
37051211710000	-79.8481	39.8966	29	30	1091	19	PA	FAYETTE	PA17	7934
37051209910000	-79.9000	39.9376	34	38	1389	18	PA	FAYETTE	PA17	7750
37051205450000	-79.6688	39.8384	74	86	2106	31	PA	FAYETTE	PA17	8032
37051202590000	-79.3768	39.9929	64	78	2417	23	PA	FAYETTE	PA17	8349
37129202870000	-79.0778	40.2711	71	85	2346	26	PA	WESTMORELAND	PA17	7752
37051214090000	-79.8247	39.9261	31	33	1236	17	PA	FAYETTE	PA17	7871
37059215070000	-79.9556	39.7963	26	24	911	18	PA	GREENE	PA17	8262
37051213740000	-79.8595	39.9399	32	34	1234	18	PA	FAYETTE	PA17	7739
37051211660000	-79.9049	39.9166	35	38	1237	21	PA	FAYETTE	PA17	7764
37051200140000	-79.4390	39.8499	72	83	2040	31	PA	FAYETTE	PA17	7768

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37111201910000	-79.3190	39.9931	65	80	2600	22	PA	SOMERSET	PA17	8460
37051211920000	-79.8843	39.8897	37	38	1179	23	PA	FAYETTE	PA17	7848
37129261150000	-79.0705	40.3444	38	46	1724	17	PA	WESTMORELAND	PA17	7723
37051209800000	-79.7123	40.0452	32	34	1147	20	PA	FAYETTE	PA17	7754
37051205140000	-79.6730	39.8410	52	65	2362	18	PA	FAYETTE	PA17	8006
37051210800000	-79.9111	39.9218	29	31	1160	18	PA	FAYETTE	PA17	7754
37051210010000	-79.8786	39.8989	28	30	1220	15	PA	FAYETTE	PA17	7875
37051210370000	-79.8770	39.9224	37	40	1288	21	PA	FAYETTE	PA17	7784
37129234200000	-79.2394	40.1347	67	81	2410	24	PA	WESTMORELAND	PA17	7992
37051210000000	-79.8874	39.8852	30	31	1146	18	PA	FAYETTE	PA17	7830
37051213830000	-79.7281	39.9950	33	35	1183	21	PA	FAYETTE	PA17	7730
37051213610000	-79.9063	39.9485	32	34	1195	19	PA	FAYETTE	PA17	7746
37051211670000	-79.8145	39.9108	31	30	999	22	PA	FAYETTE	PA17	7924
37059233140000	-79.9878	39.8538	32	35	1265	18	PA	GREENE	PA17	7725
37051213820000	-79.8306	39.9577	36	40	1339	20	PA	FAYETTE	PA17	7748
37051214000000	-79.8306	39.9613	24	19	663	23	PA	FAYETTE	PA17	7745
37059233090000	-79.9920	39.8538	37	41	1365	21	PA	GREENE	PA17	7722
37051201530000	-79.8442	39.8341	67	82	2651	22	PA	FAYETTE	PA17	8303
37051210830000	-79.8820	39.8958	29	32	1234	17	PA	FAYETTE	PA17	7861
37051213970000	-79.8779	39.8588	37	39	1225	23	PA	FAYETTE	PA17	7885
37051212460000	-79.8603	39.8859	29	30	1117	18	PA	FAYETTE	PA17	7948
37051212470000	-79.8927	39.9416	29	31	1186	17	PA	FAYETTE	PA17	7747
37051212400000	-79.8604	39.9210	25	27	1183	13	PA	FAYETTE	PA17	7788
37051200510000	-79.5513	39.8887	72	86	2412	26	PA	FAYETTE	PA17	7595
37051214170000	-79.8922	39.9011	38	40	1190	24	PA	FAYETTE	PA17	7812
37051219760000	-79.8161	39.9552	35	37	1191	22	PA	FAYETTE	PA17	7804
37051209710000	-79.8896	39.9173	43	52	1829	18	PA	FAYETTE	PA17	8153
37059242200000	-80.0463	39.7787	38	46	1705	17	PA	GREENE	PA17	8023
37051211750000	-79.8760	39.9443	32	35	1226	19	PA	FAYETTE	PA17	7737
37051215620000	-79.8186	39.9317	34	36	1156	22	PA	FAYETTE	PA17	7870
37051209620000	-79.8839	39.9064	37	41	1364	20	PA	FAYETTE	PA17	7846
37051209950000	-79.8183	39.9283	29	29	1084	18	PA	FAYETTE	PA17	7883
37111201500000	-79.2898	40.0260	71	86	2740	22	PA	SOMERSET	PA17	7808
37051213720000	-79.9057	39.9452	28	30	1180	16	PA	FAYETTE	PA17	7747
37051212390000	-79.8572	39.9421	37	40	1258	22	PA	FAYETTE	PA17	7738
37051209920000	-79.9060	39.9120	44	53	1832	19	PA	FAYETTE	PA17	8147
37111200030000	-79.2661	40.0408	62	76	2324	23	PA	SOMERSET	PA17	7980
37051212030000	-79.8188	39.9098	30	30	1073	20	PA	FAYETTE	PA17	7930
37129226170000	-79.3888	40.2201	73	86	2345	27	PA	WESTMORELAND	PA17	7856

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37129214770000	-79.2128	40.1606	72	87	2470	26	PA	WESTMORELAND	PA17	7908
37129239470000	-79.3972	40.3510	31	32	1101	20	PA	WESTMORELAND	PA17	7257
37129241370000	-79.0506	40.3183	67	81	2434	24	PA	WESTMORELAND	PA17	7924
37051201400000	-79.4489	40.1310	66	81	2727	21	PA	FAYETTE	PA17	7906
37059242680000	-80.0615	39.7914	38	46	1735	17	PA	GREENE	PA17	8331
37129239710000	-79.0980	40.2734	53	66	2207	20	PA	WESTMORELAND	PA17	7780
37051001150000	-79.6660	39.8455	65	74	1875	30	PA	FAYETTE	PA17	7977
37051200450000	-79.6910	39.7931	71	82	2138	29	PA	FAYETTE	PA17	8326
37051200560000	-79.6535	39.8436	104	123	3628	26	PA	FAYETTE	PA17	7978
37051203720000	-79.8953	39.8994	44	52	1725	20	PA	FAYETTE	PA17	8093
37129201860000	-79.2624	40.1201	66	80	2412	24	PA	WESTMORELAND	PA17	8013
37051214400000	-79.8546	39.9622	37	42	1440	19	PA	FAYETTE	PA17	7740
37051201520000	-79.3519	40.0212	64	80	2684	21	PA	FAYETTE	PA17	8127
37051212490000	-79.8450	39.8941	23	23	1074	13	PA	FAYETTE	PA17	7953
37051211760000	-79.8552	39.9456	28	30	1199	16	PA	FAYETTE	PA17	7737
37051204950000	-79.3151	40.0253	63	78	2598	21	PA	FAYETTE	PA17	7346
37051214140000	-79.8381	39.9109	36	38	1234	22	PA	FAYETTE	PA17	7900
37129204210000	-79.2346	40.1122	70	85	2573	24	PA	WESTMORELAND	PA17	8148
37129203130000	-79.3150	40.2567	71	85	2429	25	PA	WESTMORELAND	PA17	8173
37051214550000	-79.8448	39.9429	33	37	1349	18	PA	FAYETTE	PA17	7747
37059215930000	-80.0039	39.8266	44	50	1533	23	PA	GREENE	PA17	7781
37051211650000	-79.9161	39.9217	30	32	1181	18	PA	FAYETTE	PA17	7751
37129223950000	-79.2307	40.1337	78	93	2588	27	PA	WESTMORELAND	PA17	8037
37129224980000	-79.2709	40.0846	74	88	2373	28	PA	WESTMORELAND	PA17	8050
37051210300000	-79.8221	39.9178	29	29	1052	19	PA	FAYETTE	PA17	7916
37051204940000	-79.3480	40.0316	59	72	2360	21	PA	FAYETTE	PA17	7907
37059233540000	-79.9741	39.8023	34	36	1220	20	PA	GREENE	PA17	8234
37051212380000	-79.8560	39.8781	22	22	1010	13	PA	FAYETTE	PA17	7965
37129231550000	-79.1647	40.1510	72	87	2633	24	PA	WESTMORELAND	PA17	8163
37051206050000	-79.6825	39.8066	56	69	2323	20	PA	FAYETTE	PA17	8306
37051209960000	-79.6134	39.8799	68	83	2513	24	PA	FAYETTE	PA17	7838
37059231500000	-79.9651	39.8443	38	41	1251	23	PA	GREENE	PA17	7745
37059231390000	-79.9656	39.9187	31	33	1221	18	PA	GREENE	PA17	7746
37111200750000	-79.3083	40.0039	64	78	2484	22	PA	SOMERSET	PA17	8366
37059233550000	-79.9707	39.8018	29	27	901	22	PA	GREENE	PA17	8219
37051201290000	-79.5737	39.8486	74	88	2385	27	PA	FAYETTE	PA17	7486
37051215700000	-79.8351	39.9592	34	38	1357	19	PA	FAYETTE	PA17	7742
37111201560000	-79.3807	39.9072	59	74	2523	20	PA	SOMERSET	PA17	8258
37059231440000	-79.9571	39.9408	43	47	1344	25	PA	GREENE	PA17	7754

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37059217630000	-80.0174	39.8259	39	44	1456	21	PA	GREENE	PA17	7746
37111201810000	-79.3083	39.9863	69	84	2608	23	PA	SOMERSET	PA17	8296
37129229280000	-79.1742	40.1390	74	89	2540	26	PA	WESTMORELAND	PA17	7971
37051214350000	-79.9160	39.9327	43	45	1177	29	PA	FAYETTE	PA17	7747
37051212370000	-79.8412	39.9481	25	27	1229	13	PA	FAYETTE	PA17	7745
37051215510000	-79.8295	39.9265	31	34	1255	18	PA	FAYETTE	PA17	7851
37129261160000	-79.0792	40.3381	38	46	1737	17	PA	WESTMORELAND	PA17	7631
37129230610000	-79.2067	40.1562	71	86	2494	25	PA	WESTMORELAND	PA17	7928
37059242220000	-80.0492	39.7804	38	46	1699	17	PA	GREENE	PA17	8093
37051210680000	-79.8746	39.9377	30	33	1264	17	PA	FAYETTE	PA17	7742
37051212320000	-79.8414	39.9449	27	29	1211	15	PA	FAYETTE	PA17	7751
37051211790000	-79.7724	39.8450	28	30	1192	16	PA	FAYETTE	PA17	7699
37059218370000	-79.9984	39.9025	43	51	1715	20	PA	GREENE	PA17	7690
37051212060000	-79.8487	39.9443	31	33	1228	18	PA	FAYETTE	PA17	7742
37051213980000	-79.8367	39.9312	39	42	1281	24	PA	FAYETTE	PA17	7805
37051000930000	-79.6799	39.8251	54	67	2256	20	PA	FAYETTE	PA17	8062
37059233670000	-80.0134	39.8222	39	42	1283	23	PA	GREENE	PA17	7796
37059233530000	-80.0121	39.8197	31	33	1201	18	PA	GREENE	PA17	7834
37051210100000	-79.8556	39.8986	28	30	1160	17	PA	FAYETTE	PA17	7904
37129255990000	-79.1326	40.3323	33	35	1249	19	PA	WESTMORELAND	PA17	7371
37051205270000	-79.6686	39.8342	53	65	2170	20	PA	FAYETTE	PA17	8023
37059215720000	-80.0135	39.8151	43	50	1569	22	PA	GREENE	PA17	7931
37129262420000	-79.1143	40.3341	39	47	1779	17	PA	WESTMORELAND	PA17	7735
37111201540000	-79.2739	40.0539	66	80	2444	23	PA	SOMERSET	PA17	8094
37129241510000	-79.0436	40.3279	71	86	2518	25	PA	WESTMORELAND	PA17	7925
37051214240000	-79.6691	40.0605	34	36	1152	22	PA	FAYETTE	PA17	7745
37129238620000	-79.4287	40.2991	33	35	1242	19	PA	WESTMORELAND	PA17	7251
37051206700000	-79.6785	39.8178	57	69	2215	22	PA	FAYETTE	PA17	8102
37129215570000	-79.0947	40.2792	71	86	2558	24	PA	WESTMORELAND	PA17	7764
37059242210000	-80.0506	39.7722	53	61	1726	26	PA	GREENE	PA17	7500
37051205390000	-79.6661	39.8484	54	67	2280	20	PA	FAYETTE	PA17	7971
37059231040000	-79.9790	39.9082	39	44	1366	22	PA	GREENE	PA17	7729
37051207370000	-79.7507	39.7844	73	86	2357	27	PA	FAYETTE	PA17	8165
37051212270000	-79.8591	39.8969	34	35	1134	22	PA	FAYETTE	PA17	7910
37051218450000	-79.6131	39.7694	60	74	2418	21	PA	FAYETTE	PA17	6792
37063254370000	-78.9158	40.5560	69	84	2626	23	PA	INDIANA	PA17	7785
37051211740000	-79.8733	39.9469	33	36	1274	19	PA	FAYETTE	PA17	7734
37051210640000	-79.5385	40.1209	29	31	1145	18	PA	FAYETTE	PA17	7581
37051212610000	-79.8655	39.9452	29	32	1230	17	PA	FAYETTE	PA17	7733

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37051213960000	-79.8618	39.8687	29	29	1085	18	PA	FAYETTE	PA17	7958
37059233100000	-79.9921	39.8509	50	53	1312	31	PA	GREENE	PA17	7727
37129237060000	-79.6309	40.0951	68	83	2504	24	PA	WESTMORELAND	PA17	8109
37021208440000	-78.9756	40.3717	57	72	2541	19	PA	CAMBRIA	PA17	7987
37051213420000	-79.8376	39.9529	33	37	1356	18	PA	FAYETTE	PA17	7744
37051208920000	-79.8610	39.9042	35	38	1289	20	PA	FAYETTE	PA17	7873
37111201740000	-79.3577	39.9332	62	76	2548	21	PA	SOMERSET	PA17	8404
37129220810000	-79.2787	40.0747	81	95	2432	30	PA	WESTMORELAND	PA17	8052
37051211730000	-79.8683	39.9470	36	40	1401	19	PA	FAYETTE	PA17	7733
37051211770000	-79.8666	39.9424	32	34	1211	19	PA	FAYETTE	PA17	7735
37129262270000	-79.1158	40.3397	41	50	1789	18	PA	WESTMORELAND	PA17	7729
37051212480000	-79.8522	39.9144	24	26	1191	13	PA	FAYETTE	PA17	7829
37129203790000	-79.2045	40.4012	68	81	2268	26	PA	WESTMORELAND	PA17	8527
37129203800000	-79.2518	40.3362	71	83	2202	28	PA	WESTMORELAND	PA17	8339
37111200450000	-79.3339	39.9778	143	146	6482	21	PA	SOMERSET	PA17	8490
37129233820000	-79.4046	40.3293	37	39	1187	23	PA	WESTMORELAND	PA17	7270
37129203030000	-79.3708	40.2471	71	84	2261	27	PA	WESTMORELAND	PA17	7833
37051205430000	-79.6777	39.8221	56	68	2179	22	PA	FAYETTE	PA17	8063
37051215260000	-79.7436	39.9924	30	31	1145	18	PA	FAYETTE	PA17	7751
37129203160000	-79.4718	40.1676	78	92	2438	28	PA	WESTMORELAND	PA17	7735
37051214010000	-79.8272	39.9629	37	41	1355	20	PA	FAYETTE	PA17	7748
37129201000000	-79.3999	40.2023	71	84	2274	27	PA	WESTMORELAND	PA17	7261
37051208900000	-79.8312	39.9198	29	32	1213	17	PA	FAYETTE	PA17	7879
37051210850000	-79.8620	39.9482	33	35	1252	19	PA	FAYETTE	PA17	7733
37059231530000	-79.9366	39.8539	39	42	1253	24	PA	GREENE	PA17	7741
37051216260000	-79.8930	39.9211	33	35	1229	19	PA	FAYETTE	PA17	7790
37051209500000	-79.8625	39.9070	32	33	1175	19	PA	FAYETTE	PA17	7859
37051211720000	-79.8711	39.9446	29	32	1245	16	PA	FAYETTE	PA17	7735
37129202800000	-79.1899	40.1168	69	84	2539	24	PA	WESTMORELAND	PA17	8007
37129233760000	-79.4116	40.3302	31	33	1162	19	PA	WESTMORELAND	PA17	7275
37051209540000	-79.8626	39.9102	32	34	1192	19	PA	FAYETTE	PA17	7842
37129247200000	-79.6357	40.1055	31	31	1093	20	PA	WESTMORELAND	PA17	7760
37051205400000	-79.6753	39.8262	52	64	2145	20	PA	FAYETTE	PA17	8014
37051214120000	-79.8719	39.9164	41	44	1287	25	PA	FAYETTE	PA17	7812
37059242560000	-80.0434	39.7707	39	48	1785	17	PA	GREENE	PA17	7440
37051200410000	-79.6601	39.8502	89	108	3489	23	PA	FAYETTE	PA17	7950
37051000980000	-79.6613	39.8575	71	84	2213	28	PA	FAYETTE	PA17	7926
37051200190000	-79.6898	39.7697	72	86	2442	26	PA	FAYETTE	PA17	7142
37111201820000	-79.2838	40.0399	61	75	2452	21	PA	SOMERSET	PA17	8074

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37129202910000	-79.3513	40.2993	32	34	1212	19	PA	WESTMORELAND	PA17	7344
37129254590000	-79.1984	40.3060	33	38	1400	17	PA	WESTMORELAND	PA17	8087
37129262260000	-79.1122	40.3362	39	47	1775	17	PA	WESTMORELAND	PA17	7722
37051208880000	-79.8666	39.9068	32	35	1253	19	PA	FAYETTE	PA17	7861
37051214430000	-79.9158	39.9360	34	36	1183	22	PA	FAYETTE	PA17	7745
37111200150000	-79.2532	40.0461	63	78	2654	20	PA	SOMERSET	PA17	8065
37059224900000	-79.9326	39.9224	31	32	1154	19	PA	GREENE	PA17	7751
37129201390000	-79.4421	40.1601	77	91	2375	29	PA	WESTMORELAND	PA17	7862
37051210400000	-79.9001	39.9301	32	34	1216	19	PA	FAYETTE	PA17	7760
37051209030000	-79.8708	39.9056	33	37	1300	19	PA	FAYETTE	PA17	7867
37051205200000	-79.6250	39.8750	61	73	2266	23	PA	FAYETTE	PA17	7956
37051210210000	-79.9147	39.9080	35	37	1222	21	PA	FAYETTE	PA17	7750
37051000990000	-79.6861	39.8133	49	64	2456	16	PA	FAYETTE	PA17	8225
37059215050000	-79.9349	39.7914	29	31	1162	18	PA	GREENE	PA17	8155
37051001120000	-79.6659	39.8543	57	68	2115	23	PA	FAYETTE	PA17	7890
37051200220000	-79.5604	39.8760	69	83	2427	25	PA	FAYETTE	PA17	7603
37059215080000	-79.9357	39.7963	25	24	929	18	PA	GREENE	PA17	8168
37051209000000	-79.8694	39.9103	41	48	1700	19	PA	FAYETTE	PA17	8228
37051209990000	-79.8658	39.9125	31	34	1269	17	PA	FAYETTE	PA17	7830
37051213690000	-79.9070	39.9237	30	32	1177	18	PA	FAYETTE	PA17	7758
37059215160000	-79.9490	39.7856	29	27	885	23	PA	GREENE	PA17	8151
37051211610000	-79.9043	39.9264	37	39	1210	23	PA	FAYETTE	PA17	7762
37051201690000	-79.4238	40.0354	66	80	2487	23	PA	FAYETTE	PA17	7852
37051205300000	-79.6407	39.8858	57	71	2430	20	PA	FAYETTE	PA17	7938
37051212220000	-79.9195	39.9187	29	31	1165	18	PA	FAYETTE	PA17	7750
37051900170000	-79.5250	40.0148	79	96	2816	25	PA	FAYETTE	PA17	8336
37051201310000	-79.6847	39.7681	80	99	3455	21	PA	FAYETTE	PA17	6922
37051211910000	-79.8702	39.9190	37	39	1255	22	PA	FAYETTE	PA17	7798
37129243930000	-79.5301	40.1614	27	28	1133	16	PA	WESTMORELAND	PA17	7382
37051214860000	-79.7244	40.0251	35	37	1171	22	PA	FAYETTE	PA17	7748
37051215570000	-79.7252	40.0221	32	32	1045	22	PA	FAYETTE	PA17	7747
37051214320000	-79.8682	39.9560	37	41	1359	20	PA	FAYETTE	PA17	7733
37051212510000	-79.8647	39.9187	32	34	1253	18	PA	FAYETTE	PA17	7798
37129235660000	-79.4100	40.3248	31	32	1173	18	PA	WESTMORELAND	PA17	7267
37051210660000	-79.8681	39.8837	30	30	1071	20	PA	FAYETTE	PA17	7925
37129240850000	-79.1964	40.2363	73	88	2695	24	PA	WESTMORELAND	PA17	7773
37051200290000	-79.5303	39.9490	73	87	2448	26	PA	FAYETTE	PA17	7807
37051207700000	-79.9309	39.9502	29	30	1158	17	PA	FAYETTE	PA17	7753
37063249950000	-79.0656	40.4579	35	37	1202	22	PA	INDIANA	PA17	7255

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37063318950000	-79.2195	40.4279	29	29	1068	19	PA	INDIANA	PA17	7918
37063202770000	-78.9566	40.5198	68	84	2625	23	PA	INDIANA	PA17	7813
37051215890000	-79.9317	39.9593	35	39	1341	19	PA	FAYETTE	PA17	7756
37129217890000	-79.4162	40.3349	67	81	2515	23	PA	WESTMORELAND	PA17	7638
37063247150000	-79.0573	40.4636	35	36	1145	23	PA	INDIANA	PA17	7249
37051211700000	-79.7334	40.0489	24	25	1159	13	PA	FAYETTE	PA17	7754
37063337160000	-79.2240	40.4323	31	33	1192	19	PA	INDIANA	PA17	7894
37051211420000	-79.7155	40.0615	28	29	1090	18	PA	FAYETTE	PA17	7760
37063201550000	-79.0040	40.4984	73	87	2484	26	PA	INDIANA	PA17	7846
37129241380000	-79.3384	40.4016	31	32	1138	19	PA	WESTMORELAND	PA17	7238
37129203720000	-79.3350	40.4021	74	89	2445	27	PA	WESTMORELAND	PA17	7631
37129203450000	-79.3213	40.3972	66	81	2486	23	PA	WESTMORELAND	PA17	7696
37129230950000	-79.2902	40.4103	33	36	1288	19	PA	WESTMORELAND	PA17	7586
37051213840000	-79.7453	40.0242	29	31	1191	17	PA	FAYETTE	PA17	7751
37051212540000	-79.7800	40.0072	30	33	1255	17	PA	FAYETTE	PA17	7760
37051219770000	-79.7329	40.0585	24	23	1008	15	PA	FAYETTE	PA17	7758
37051215030000	-79.7556	40.0182	23	23	1054	13	PA	FAYETTE	PA17	7755
37111201130000	-79.2625	40.0038	92	107	2535	33	PA	SOMERSET	PA17	7950
37129203360000	-79.3216	40.4034	71	84	2408	26	PA	WESTMORELAND	PA17	7660
37129232650000	-79.6667	40.1167	61	76	2486	21	PA	WESTMORELAND	PA17	8201
37129243700000	-79.4550	40.2888	26	27	1171	14	PA	WESTMORELAND	PA17	7235
37129243740000	-79.4519	40.2918	31	33	1169	19	PA	WESTMORELAND	PA17	7236
37129241990000	-79.4841	40.2668	30	31	1127	19	PA	WESTMORELAND	PA17	7231
37129237070000	-79.6141	40.1593	30	32	1188	18	PA	WESTMORELAND	PA17	7489
37051211600000	-79.7384	40.0682	25	24	976	16	PA	FAYETTE	PA17	7758
37129218830000	-79.4031	40.3654	68	81	2277	26	PA	WESTMORELAND	PA17	7607
37063258260000	-78.9303	40.5875	74	89	2555	25	PA	INDIANA	PA17	7752
37063214960000	-78.8862	40.6193	60	75	2519	20	PA	INDIANA	PA17	7868
37129225960000	-79.4986	40.2583	29	31	1177	17	PA	WESTMORELAND	PA17	7223
37129235710000	-79.4318	40.3155	31	33	1213	18	PA	WESTMORELAND	PA17	7254
37129237810000	-79.4763	40.2629	29	30	1127	18	PA	WESTMORELAND	PA17	7243
37129244810000	-79.5898	40.1535	31	34	1234	18	PA	WESTMORELAND	PA17	7348
37129231340000	-79.1826	40.1300	64	79	2620	21	PA	WESTMORELAND	PA17	8009
37051215170000	-79.7341	40.0632	27	26	966	18	PA	FAYETTE	PA17	7759
37129244790000	-79.6186	40.1550	25	26	1142	14	PA	WESTMORELAND	PA17	7545
37129250060000	-79.6216	40.1533	33	35	1184	20	PA	WESTMORELAND	PA17	7578
37051217000000	-79.7194	40.0614	24	23	978	15	PA	FAYETTE	PA17	7760
37129247510000	-79.6184	40.1524	30	31	1139	18	PA	WESTMORELAND	PA17	7552
37021207900000	-78.9479	40.4082	57	71	2391	20	PA	CAMBRIA	PA17	8009

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37051212560000	-79.7350	40.0691	27	26	958	19	PA	FAYETTE	PA17	7760
37129204000000	-79.4183	40.3467	63	77	2346	23	PA	WESTMORELAND	PA17	7652
37051212590000	-79.7389	40.0619	26	25	974	18	PA	FAYETTE	PA17	7757
37129242830000	-79.6552	40.1447	32	32	1071	21	PA	WESTMORELAND	PA17	7758
37129243660000	-79.4316	40.3463	33	34	1122	22	PA	WESTMORELAND	PA17	7262
37051212580000	-79.7341	40.0661	26	25	954	18	PA	FAYETTE	PA17	7759
37051212180000	-79.7240	40.0741	31	30	974	23	PA	FAYETTE	PA17	7759
37129203640000	-79.4299	40.3377	75	89	2359	28	PA	WESTMORELAND	PA17	7653
37059217920000	-80.1738	39.8069	47	56	1841	21	PA	GREENE	PA17	7124
37063243190000	-78.9208	40.5917	77	92	2515	27	PA	INDIANA	PA17	7751
37129246940000	-79.4335	40.3720	32	35	1234	19	PA	WESTMORELAND	PA17	7187
37129230140000	-79.2851	40.4141	34	36	1227	20	PA	WESTMORELAND	PA17	7623
37129203220000	-79.3112	40.4166	82	96	2359	31	PA	WESTMORELAND	PA17	7310
37051211820000	-79.7440	40.0591	22	22	1025	13	PA	FAYETTE	PA17	7754
37129203370000	-79.3023	40.4242	53	66	2256	19	PA	WESTMORELAND	PA17	7679
37129203590000	-79.3076	40.4244	64	77	2331	23	PA	WESTMORELAND	PA17	7649
37129237180000	-79.3056	40.4152	29	30	1116	18	PA	WESTMORELAND	PA17	7378
37129244330000	-79.6554	40.1539	27	27	1063	17	PA	WESTMORELAND	PA17	7695
37129233470000	-79.2918	40.4198	36	39	1256	22	PA	WESTMORELAND	PA17	7507
37129233110000	-79.2890	40.4179	39	42	1276	23	PA	WESTMORELAND	PA17	7555
37063316940000	-78.9568	40.5822	64	79	2555	22	PA	INDIANA	PA17	7779
37129244560000	-79.6515	40.1549	27	27	1081	16	PA	WESTMORELAND	PA17	7689
37063320290000	-78.8760	40.6135	60	75	2573	20	PA	INDIANA	PA17	7874
37129246000000	-79.4244	40.3539	31	33	1173	19	PA	WESTMORELAND	PA17	7267
37129248780000	-79.4246	40.3577	29	30	1131	18	PA	WESTMORELAND	PA17	7260
37129244260000	-79.4245	40.3484	33	34	1117	21	PA	WESTMORELAND	PA17	7276
37129244270000	-79.4253	40.3512	31	31	1101	20	PA	WESTMORELAND	PA17	7271
37059215530000	-79.9433	39.7393	21	16	683	17	PA	GREENE	PA17	2867
37021208790000	-78.8012	40.6550	37	44	1649	17	PA	CAMBRIA	PA17	7794
37021208780000	-78.7951	40.6523	36	43	1648	16	PA	CAMBRIA	PA17	7767
37129247030000	-79.4265	40.3619	24	25	1166	13	PA	WESTMORELAND	PA17	7246
37129244290000	-79.4301	40.3707	28	30	1251	15	PA	WESTMORELAND	PA17	7207
37111201480000	-79.1769	40.1161	69	86	2853	21	PA	SOMERSET	PA17	7966
37021200060000	-78.9520	40.4047	72	86	2345	27	PA	CAMBRIA	PA17	7997
37021207890000	-78.9322	40.4212	72	86	2452	26	PA	CAMBRIA	PA17	7960
37111200250000	-79.4072	39.8681	73	88	2551	25	PA	SOMERSET	PA17	8101
37021203990000	-78.7258	40.6701	34	36	1174	21	PA	CAMBRIA	PA17	7731
37021200100000	-78.8996	40.4474	68	83	2466	24	PA	CAMBRIA	PA17	7923
37111201310000	-79.1847	40.1007	61	77	2734	19	PA	SOMERSET	PA17	7961

API	Decimal Longitude	Decimal Latitude	BHT (°C)	Harrison corrected BHT(°C)	Well Depth (m)	Harrison corrected gradient (°C/km)	State	County	COSUNA	Sediment Thickness (m)
37021200080000	-78.9593	40.3924	61	75	2448	21	PA	CAMBRIA	PA17	8003
37111200710000	-79.3526	39.9047	62	77	2521	21	PA	SOMERSET	PA17	8100
37051200110000	-79.4258	39.8423	25	21	768	20	PA	FAYETTE	PA17	8161
37021203720000	-78.7263	40.6569	24	25	1099	14	PA	CAMBRIA	PA17	7655
37111200130000	-79.3930	39.8896	75	90	2555	26	PA	SOMERSET	PA17	8131
37111202280000	-79.3907	39.8844	72	87	2475	26	PA	SOMERSET	PA17	7321
37051200100000	-79.4439	39.8381	76	87	2146	31	PA	FAYETTE	PA17	7775
37021203370000	-78.7260	40.6636	33	35	1170	21	PA	CAMBRIA	PA17	7751